

00069US1.ST25
SEQUENCE LISTING

<110> Wood, Linda
Vogeli, Gabriel
Karnovsky, Alla
Linske-O'Connell, Lisa I.
Wang, Jun
Liu, Derong

<120> Human Ion Channels

<130> 00069US1

<150> 60/188,517
<151> 2000-03-10

<160> 117

<170> PatentIn version 3.0

<210> 1

<211> 574

<212> DNA

<213> Homo sapiens

<400> 1
ccctcctccc tggccccggg tgccctttct cctcctgaag tgggaggagc catactgatg 60
aggggggtgc cactggcagg ggagcaagtc attcatcatg agcaggaaga cgttgtagcc 120
cagcagaagt gttatcttga atggggcacg attctcgctc tctgctggca ggtagaagct 180
gagggcattca atggcaacca gaaagctact gggcaccagc aggttatga tgttagaggct 240
tggcctgcgc ctgatggcca cctggagaga gaccggagaa gatggcaa ataatagatgt 300
cagaggcgtc aatttgtata tctgaccct aatcttgcc aatgtgctgt gaggctgctg 360
gggacgatct tttaagtaa cactttgca tataattgtg ctcgcctaca tagggccctc 420
tgatttgttgc tctaattttt attcattttt aacctactag gaacacaatg actgtagaat 480
tttaggtgca agtggccct ttaagtcat ctagcagta ggggtgagct gatccattct 540
gagcagcagg gcttattaca gtccagccat tcct 574

<210> 2

<211> 463

<212> DNA

<213> Homo sapiens

<400> 2
agaagaaaac agtgactggt cccaagtaag tctgaaaccc aacaggagga aacaacatga 60
aatgttacgg cttgagaata atcattggct caatgttctg ccctccaggc ccactaagg 120
gatagtgcac ctttcaggac acaatgtggt agcagccctg ccctgtggct ttgggtggcc 180

00069US1.ST25

ttgccccctga ggcagccatg tgcttgcc ttgctcctgc ctccacagta gctctgtgcc	240
tgggtcatgc atctgaggct ctcctggaaa ccaccactgg tgactctact ggtctggact	300
catgggccta gtggggccc tctgttagtgg cccttccca acagtgattc tccgtctcag	360
ccccatggct ctcttgggc atcctttaa ttctgggga aggccat gccccacat	420
ctttctactc aaggcccgt gatggatgg gtagctgtga tga	463

<210> 3
<211> 377
<212> DNA
<213> Homo sapiens

<400> 3	
tatactatac ataaaacaat tagagaacaa ctaagtgcta aattaagttt tctggcaatg	60
gtttctgatt atatatttgt ttgattttta aggtatacat gcatgttagtt tcagagttag	120
aaggcaaagt agttctataa accttgtaac aaaaatagca attcttgagg cctgcatcat	180
cttaggttca gctttcaga ggcaacactt taaattgttt cagctggtaa tggtaggat	240
ctgtacctcc atatctctat aacacagatg tatggttttt ttttattagg cattatccat	300
ggactttca ttatgaaaga tgaagatttc tgccctaacc ccacacccct actccccacc	360
acacacaatt gtcttct	377

<210> 4
<211> 588
<212> DNA
<213> Homo sapiens

<400> 4	
ccggccttcc cgtgccctca cagtcctcct cctcagctgt ttcagctaaa gtcccaggat	60
taatgcttat tggctggctt gggcctgaac tgaactccct gaactgaggc tagcaggatg	120
aatgctcta atcagccaga tgtgagtcat tcacccctc ctggagcctg gggctgggaa	180
cctgtgggtg tcaaccctgc caagtgacct ggacagaaca cagaggagca gaaactcccc	240
agaggaaac tgaggaggtg ggggtggagg gacacagagc cagcaggccc accggaaggaa	300
ggcccttgca tttctgcaca tccacccagc caggaggaga cagctaggcc caggggttgc	360
ggcagtgcgt gcaaggcggtt ttcttgcagg agaggctggt gtttacaggg gacaggaaat	420
gtgggtgaac tcagccgttt tctttgcggg ggcagaatgt acaggctgat acagtgaccg	480
cagaagctgc tgggtcccccc tgggtttt tggcagtg aagacccccc tctgcccccc	540
tgcacagctc ctgggttcc caaatatttt gtctgtgctg acagcttt	588

00069US1.ST25

<210> 5
<211> 186
<212> DNA
<213> Homo sapiens

<400> 5
cctttcatca attcttggaa attcttaggc tttatgtttc aaatattgcc ttttctcttt 60
ttcttttact ttgggaaac tcccattatg tatatgtatgg actttcttat tctgtctttc 120
ctatctttt ccatattttc cacttttat attggctcc tttttcttag aatttctcaa 180
atctct 186

<210> 6
<211> 269
<212> DNA
<213> Homo sapiens

<400> 6
tctgtgtt tacccagggg actgccgcat ggcgcattgcc gagcagaaac tgatggacga 60
ccttctgaac aaaacctgtt acaacaacct ggatccgccc agccaccagg tcctcacagc 120
tcatctccat ccagacggcg ctctccctgg cccagtqcat cagcgtggta ggtgcagagg 180
gtacctgtgg ctcaggctca ggtgaagagg cagctcatgc ccaagcccta agcagtcaat 240
gtccagagga atgaaatgac tagagttga 269

<210> 7
<211> 637
<212> DNA
<213> Homo sapiens

<400> 7
cccttgat tcagacatct gccctggac ccacagtagg ttccgaggga gacgttcagc 60
ctgggctggc ctggggatag cctaaagtgg gggtgccatg ggaggggctg agtgcggc 120
agcttagaag ggtcctgggg aaaagcttcc agggcagcgt ggcaaccagg ttatgtggta 180
gggagagggg atcactacac cccccacagct aagggaagt ctagagaggg gtaagagaga 240
ggaggggccc agataggcag tacttgtt agagtagcat gtctggccgc cacacaagac 300
tgctggggat gcggatggca tccaggccac cataggcatt ggggtccat cgttagttagg 360
catctgtcca ctccctggcg atccacagat acagggtcag cacctggttc cgttcatcct 420
agtggggca gggaatggca gagatgtgg catgtatatg catatcctgc cctgtctgt 480
cacactcccc tgcaggcgtc tggtcagcac ccacaaacct gacttgtcca taccgtccag 540
ttcccaacca gacctgaccc tgcgtatgtga ccttagtggg ctcttctt ttctgcccgt 600
ttcctcagca ggaatatggg gtgagaatcc ctgctta 637

<210> 8
<211> 640
<212> DNA
<213> Homo sapiens

<400> 8
cctcttagtt tgtaatcgc caccctattt tttttttttt ccaaaagcaa attgttcttt 60
gcaagaacaa ttcttattgac ttcaaattac tcttgctata ggtccttcg aagtatcgta 120
atgacatgta cacacagact tgagggaaaa aagtgccttt ctgaaaaagt aatgattgaa 180
atttttatTT taaatgattc cttagattga attcacttta gattaacaga ttttcctgcc 240
caattgattt tctggcatcc atgcagtgtat ccagcagaga taaaatgggg gttcatttag 300
tccatgctc caaggaaaag tgagagcctg gcaaagagag ccagcaaagc ttctttcttg 360
cctgctcggt tggagcagga caactggagc cggtcagctg ctgaccagat gtcgccttca 420
attaatattc caaccctcaa agacatttat cgcttactct cggaaagcaga gcagctgagt 480
aataaaaggga accactaaag ctgtttttt ttcaagagca tttataatgg ctaaattgct 540
tggaaataaaat tagcacgaaa aataaacata gtttgtacag tatctgtaaa acaaatttcc 600
aatcttggaa aaataqaqcgq acaaaagtggg agcttgcatt 640

```
<210> 9  
<211> 573  
<212> DNA  
<213> Homo sapiens
```

<400> 9
caagtgcagg ccaatatatt ggtgtggtcc taactccaag tggttttagg ccatatcaa 60
tatctgtctg cccaaaggct atcaaggggc acttttctgg tgacaccttg ttaaatcaag 120
aatgggggga taggctgtgg ttattagggt cacaaatggg agtgggagga tcaaggttt 180
aagaagaatg gaaagggtgg gagaggccga caggacaagc tcaccgtcac tcacctctgt 240
ccctcactgc cctgatgcag gtatggaca atccttcat taattgaaac cccaaaagagt 300
gtgttggcat caataaactc acagtattag ctgaaaacct gtggctccca gacatcttca 360
tcgttggaaatc gtgcgtatgc aggctgggaa agccagcgtg aaacctcatc tgccgagaac 420
agcctagggt cagcacaggg catggggcca ccgaaaagatt cagacaggca cacagtctca 480
acgaactgac ttccacacat cactacgagt agaagaggcg agagagtgac attaaagaaa 540
qaqccccqqq ccaggcgcgg tggctcacgc ctg 573

<210> 10

00069US1.ST25

<211> 716
<212> DNA
<213> Homo sapiens

<400> 10
caattatata cctgtgtctt taatccctga gagcagaatg atgaatattt gagccccagt 60
atatcatata tacatgtaat taattttaa aaggttagttc aatattcaaa tttattgcaa 120
agtggccaag aacagtgcaa gtgttgacga ctataaata gaactacatt gactattac 180
attagggtct tgaggattga aataacattc ttctgtttt cctaataat gacaggctta 240
tatacataga cttgagttaa aaattgacca atattaactg ccatgagccc gtggtaaca 300
aattattgct gtcatctcaa acacaataat taatagatta attactagga tttaccaaaa 360
tggcttttg aagatctatt ttaatgttc tttctgtta aaagcagctt acacaagttt 420
cctaaatcta tactgccact aatgatagta ccacagcatt ttagtataaa atttctggag 480
tttgaatgtt tgccccctcc aaaattcacf ttgaaattta attgtcattt taaaagtatt 540
aagatatgag accttaaga ggtgattagg ccacccagta ttatgggtgg aattaatgcc 600
attatgaaag aatgaatttg gttccctttt tcctctgtgt cctttggcca tgtaatgaga 660
caacaagaaa gcccttgtca gatgtcacca ttctttat tggactttcc agcatt 716

3
<210> 11
<211> 630
<212> DNA
<213> Homo sapiens

<400> 11
cttcttattc ttggacttta taaatatttg aaccatcaca tgtataagtt caggccatata 60
gtaaataaga cattgtacat acttgattgg tttattatttg cctattgctt tctccctatc 120
aattccccca aaatcagtgt tatgcagatt tactgtatta aactacaatt ccattccttc 180
atccttata gccatataaaa ttatatttct gagagtagct aatataatgtt gtgattcctt 240
aaagtcaata taccacagtc tgatccaatc taggcagaaa gatatagtgg gtcaaatttg 300
gaatttaaaa catagggctt cttcaggctt atttaagctt gctaaaaaat caaagcctac 360
caagctagtt agtctttctg tgtcacactt gctaccaatg gaagttctcc cttttcagaa 420
gtaatagagg tccacacagt tgtctggaag aaaattgatc ttgcaagtac atcatgtcta 480
ttcaacacca aatttactag gttcaacatg gaggattcaa tcagagtgtg tgtctataag 540
aaccaagctc acgttcatgt gattattctg gttggccaa tgagttgctt ggggctctgt 600
aggaaagatt tacagcaaag tagtaaggct 630

00069US1.ST25

<210>	12	
<211>	619	
<212>	DNA	
<213>	Homo sapiens	
<400>	12	
atcagctgaa	ggatcaaagt cacaattact agctgtgagt gtgccaagct aaccat tag	60
cacccatgcc	acaaggcatgc tctgtgctac tcagcatcat gtacacattc tcagaagtga	120
cacaagtta	catcagaagt gttttgtatt tcagat tag ggattttca ttatagttat	180
cagttgagca	tctcaa atcc tgaaaatcca aaacactcca atgagcattt ccttgagtg	240
tcacatttgtt	actcaaagaa tttcagattt tggagcattt tggattttca ggtttggcat	300
gtacatttagt	ccacgttcac actgttacaa agacataccc aagactgggt aatttataaa	360
gaaaagaggt	ttaaatgact cacagttcca catggctggt gaggccacag gaaacttaca	420
atcatggcga	aaagcacctc ttcacaggc agcaggagac agaagggtga ggagcaaagg	480
gggaggagcc	ccttataaaaa ccatcagatc tcctgagaac tccctcgta tcacaagaac	540
agcatggggg	aaatcacccc catgatccc ttccttagga ttctactgga tccagcactg	600
tccaatagat	tttttttt	619
<210>	13	
<211>	448	
<212>	DNA	
<213>	Homo sapiens	
<400>	13	
gaccatttag	gtggctatgg tcataatcat gaaagcttgg acacagtgg ggtggcag	60
gtgatgaggt	ttggagcaaa ggtgacgtg atctgactga ggcttaatag gatcattctg	120
gtttctgggg	atgagaaagt aaaatttcta gatattttga agcatttct gttggcctga	180
atggcaggag	tatgtgtgaa aaaggaagaa ggaatccata gacttgctat ttgagtttag	240
aaaagggttt	ggcctcatca aggtatactc ggtcactggg cgtgtaaaa aagatggccg	300
agggagaatt	cctagaaggg gaaaataggg agggaggaca tgggaggata acagactcct	360
aaatacatgt	ggtttagtttc attgggtgtc catatggaaa ttaccctac ctcaaaccat	420
cacacaaatg	atgaatttaa gatatcag	448
<210>	14	
<211>	547	
<212>	DNA	
<213>	Homo sapiens	
<400>	14	
actcctgaaa	tcctagcccc gaccctgagc cattcaactc aagcagcccc tgagactaac	60

00069US1.ST25

atagggagct gcctggagac ttcccacagt attcattctg agaggaagct cacacagggt	120
cctagacaga tcctaaatcc taagcagcta caggaaggca ccatttttag aacacagccc	180
ctatcatact gtattctgct ggagggccca atagccccctg tatcttcaca tccctggagc	240
cccattgaca ttctccaccc ttattcacca ccgcagctgg ctctgctgcc aaggccaaa	300
tgcaagccat tgtcagtaac ccagctgcct ccagtagcag ggccactgtg catttaaagg	360
catcccaaaa aaaggctatc tcacttatag cagccacctg aggccaaaat gtgtgctccc	420
cagccacctt actgttgcca ctgaaagcaa ccctgccctc cctagcagca gggcctggc	480
acagctgctg ctgctccac ccaggcattc tgccaatggc ctggatcac tacattccgg	540
gctacca	547

<210> 15

<211> 700

<212> DNA

<213> Homo sapiens

<400> 15	
ctgggcaagc tttaaagttt gggattttcc actgtccttt ccgggtgcgag catttattga	60
attttgcagt agtctccata atttactgag gagctacagg aggagaaaca gaaaacagtt	120
aggatatgcc atgctttcca agaggaactg gcaactgcag tgaggatgca tttaaaca	180
ccagtgtag gatacatctc tctacgttat gcagatccac tccatttcta aaagcaagtt	240
gaacagcaaa tttcagttga tggaaaccta tatttgatta tttaaaaata ggaaaacagt	300
gattacattt ataacagtgt aaaattggta atgtattatt tataattatt ataatcatgt	360
gtttccaaatc caccaaaaga atatgtacca atttggccaa ctatcactaa aatactctt	420
actctatagt aaatcaacaa ggttttattc aagctaatta caaaaaaaaaa cttttttttt	480
tttttagcac ttgc当地act ttaggactgt gcttgtgtgt ggtatacaca ttgaaataaa	540
cagggtaatt tattgtattc taacaatggc tccttctctc ctccctccctt tggaggaatc	600
ccggcaagg aggagtgaaa gggctatga gtgctgaaa gagccctacc ccgatgtcac	660
ctttcacagt gaccatgcgc cgcaaggacgc tctactatgg	700

<210> 16

<211> 567

<212> DNA

<213> Homo sapiens

<400> 16	
cagcgatcg tcaggcccccc ccggcccccc gctgctcacc gatgagcggc acgctctcg	60

00069US1.ST25

ccgggtggcat	gctctcgccc	agcagcaact	gggaagacgg	tgagcgccag	cagcacggtg	120
acgcccacgc	acaccttctc	gcctgagtcg	gcaggcaggt	ggaaggcgag	cggcgcaagc	180
agcgagatga	gcacgcaggg	cagcagcagg	ttgcacacgt	agggcggcgg	cggcgccggc	240
cagcagcagc	gtgaaggta	cgtcggtta	gggctcgag	cagcagccgt	aggtagcac	300
gcgcgcgcgc	gccggcatgc	ccagcacgcg	ccactccacg	ttctccacga	agtccgcccag	360
gctggctgca	gcgcgcgcgc	gccgcacatc	cagttggtgc	ccgccgtgag	tccaggagcc	420
gaacgtcagg	ccgcagtgt	gggcgtcgaa	cgggaaggct	gctacatcca	cgcggcacga	480
gctgcgcgtg	atggccggcg	cgttcccagc	gcacggcgcc	atcgtggcgc	aggaccacgt	540
tggtgctggc	ggaacctgga	ggctgctg				567

<210> 17
<211> 507
<212> DNA
<213> Homo sapiens

<400>	17					
cctcccttag	cacttgacct	ttattaactc	aggtaagcat	caccacaaac	ctaggaagta	60
ggtcctctgg	gtatcccatt	tgtacaaaaa	gggattcgta	tcttgcucca	gctcatgccc	120
gtcgttattt	gagagcggga	ctgtccttgg	tttgttatga	gtgcagcctc	cagcagtgtac	180
gggagcaatt	agagagcagt	agcttctgat	gacccacgtg	taggaatgaa	ggatggggag	240
aactcgcccc	ttacctcctt	cctgcttcca	tccatggggc	ttggagggtc	tggagagcitt	300
catggtgggc	ttatccat	ttgtgcagag	gtggctggga	agtcaggaa	ccacaggcct	360
ttgtttttag	tcaattggct	ttctctctct	cttgcaggaa	agtactactg	gccactatga	420
ccatggtcac	attctcaaca	gcactcacca	tccttatcat	gaacctgcat	tactgtggc	480
ccagtgtccg	cccagtgcaca	gcctggg				507

<210> 18
<211> 446
<212> DNA
<213> Homo sapiens

<400>	18					
agggccggct	ggctctcaag	ctgttccgtg	acctctttgc	caactacaca	agtgcctg	60
gacctgtggc	agacacagac	cagactctga	atgtgaccct	ggaggtgaca	ctgtcccaga	120
tcatcgacat	ggtgcgttgt	ggtgtggta	cagctgtgga	gtcttacctg	tcacagtgtc	180
aagaaatgaa	ggggtgagag	actgggatta	ttctccatgg	aatttctttt	ctgtaaatgt	240
taatattaac	aaaggttagca	gttacaaaact	gttgggtact	gactgttggg	tactgagttat	300

00069US1.ST25

tgggtgccta cctcgtgcc	aatattttgt tcaccta	ttactgaatc cctgcta	360
aggggattct cacccatat	tcctgctgag gaaacggca	gaaaagagaa gagcccacta	420
aggcacatg gcaaggtag	gtctgg		446

<210> 19
<211> 588
<212> PRT
<213> Homo sapiens

<400> 19

Cys Ala Gly Thr Gly Gly Ala Thr	Thr Thr Ala Gly Ala Ala	Thr	
1	5	10	15

Cys Cys Cys Thr Gly Gly Thr	Gly Ala Ala Ala Gly Thr Cys Thr	
20	25	30

Gly Gly Ala Cys Thr Cys Thr	Thr Gly Thr Gly Gly Cys Thr Thr Ala	
35	40	45

Thr Thr Thr Gly Gly Cys Cys Cys	Thr Cys Thr Ala Gly Cys	
50	55	60

Ala Thr Thr Thr Gly Thr Gly Gly Ala	Gly Ala Gly Gly Cys Ala Gly		
65	70	75	80

Gly Cys Ala Gly Ala Cys Thr Cys Cys	Ala Gly Gly Thr Cys Cys Thr	
85	90	95

Thr Gly Ala Ala Ala Gly Gly Ala	Gly Gly Thr Gly Thr Gly	
100	105	110

Gly Ala Gly Gly Ala Gly Ala Ala	Thr Thr Thr Gly Thr Cys Ala	
115	120	125

Gly Cys Cys Thr Gly Gly Cys Cys	Ala Gly Ala Ala Gly Ala	
130	135	140

Thr Ala Gly Thr Ala Cys Cys Ala	Gly Thr Thr Cys Ala Cys Thr Cys		
145	150	155	160

Cys Ala Thr Gly Gly Cys Cys Thr	Thr Thr Ala Cys Cys Thr Cys Ala	
165	170	175

Thr Gly Thr Gly Thr Cys Cys Thr	Gly Cys Ala Gly Gly Cys Ala	
180	185	190

Gly Gly Cys Cys Ala Gly Gly Ala	Gly Gly Ala Cys Thr Ala	
195	200	205

Gly Ala Gly Cys Cys Ala Cys Ala	Gly Cys Thr Ala Gly Ala Gly Cys	
210	215	220

Ala Ala Gly Ala Gly Ala Gly Cys	Ala Gly Ala Cys Ala Cys		
225	230	235	240

00069US1.ST25

Cys Ala Gly Gly Ala Gly Gly Ala Cys Ala Cys Thr Cys Ala Thr Ala
 245 250 255

Ala Gly Gly Ala Cys Ala Gly Gly Gly Cys Cys Cys Cys Ala Gly Cys
 260 265 270

Cys Cys Thr Gly Gly Ala Gly Thr Gly Gly Ala Gly Gly Gly Thr
 275 280 285

Gly Thr Gly Ala Gly Cys Ala Gly Ala Gly Cys Cys Cys Thr Gly
 290 295 300

Gly Gly Ala Cys Thr Ala Gly Gly Cys Cys Thr Gly Gly Ala
 305 310 315 320

Thr Gly Gly Ala Cys Ala Ala Cys Cys Cys Thr Cys Cys Thr Thr Ala
 325 330 335

Cys Thr Gly Ala Cys Cys Cys Thr Cys Cys Ala Gly Ala Gly Thr Gly
 340 345 350

Cys Cys Thr Gly Gly Ala Gly Cys Thr Gly Ala Gly Gly Cys
 355 360 365

Cys Gly Gly Cys Thr Gly Gly Cys Thr Cys Thr Cys Ala Ala Gly Cys
 370 375 380

Thr Gly Thr Thr Cys Cys Gly Thr Gly Ala Cys Cys Thr Cys Thr Thr
 385 390 395 400

Thr Gly Cys Cys Ala Ala Cys Thr Ala Cys Ala Cys Ala Ala Gly Thr
 405 410 415

Gly Cys Cys Cys Thr Gly Ala Gly Ala Cys Cys Thr Gly Thr Gly Gly
 420 425 430

Cys Ala Gly Ala Cys Ala Cys Ala Gly Ala Cys Cys Ala Gly Ala Cys
 435 440 445

Thr Cys Thr Thr Gly Ala Ala Thr Gly Thr Gly Ala Cys Cys Cys Thr
 450 455 460

Gly Gly Gly Ala Gly Gly Thr Gly Ala Cys Ala Cys Thr Gly Thr Cys
 465 470 475 480

Cys Cys Ala Gly Ala Thr Cys Ala Thr Thr Cys Gly Ala Cys Ala Thr
 485 490 495

Gly Gly Thr Gly Cys Gly Thr Thr Gly Thr Gly Gly Thr Gly Gly
 500 505 510

Thr Gly Gly Thr Ala Cys Ala Gly Cys Thr Gly Thr Gly Ala Gly
 515 520 525

Thr Cys Thr Thr Ala Cys Cys Thr Gly Thr Cys Ala Cys Ala Gly Thr
 530 535 540

Gly Thr Cys Ala Ala Gly Ala Ala Ala Thr Gly Ala Ala Ala Gly Gly

00069US1.ST25

545	550	555	560												
Gly	Gly	Thr	Gly	Ala	Gly	Ala	Gly	Ala	Cys	Thr	Gly	Gly	Gly	Ala	Thr
				565					570					575	
Thr	Ala	Thr	Thr	Cys	Thr	Cys	Cys	Ala	Thr	Gly	Gly				
				580					585						
<210>	20														
<211>	525														
<212>	DNA														
<213>	Homo sapiens														
<400>	20														
ttagtgacgc	ccattatcca	aatcttctaa	ctattcaaaa	agggaatcct	acaaaaataaa									60	
ataatgcagt	attgttttat	ttagttatac	ctatatgcc	cacatactcc	accaaagatt									120	
tattatttgat	ctatccagtc	tcaccat	ctctat	ctattgtct	aataaagcag									180	
tcctcat	ttccttg	tatctgccat	ccgtccgtcc	ttccttc	cttccacag									240	
acttccttct	acatccctgc	ctctgtt	ccccatcatca	gtacatgaca	tccctatcta									300	
cccattgttt	agacatcatc	cctacactca	ctgattctac	attttaatta	tttctcaa									360	
tcatttacct	ggt	ttttt	ctccata	accctaatcc	tgacctatga	ttc	atctct	ta						420	
tactgagagt	ctcttcatat	tgtttcata	ctat	tttattta	caacaata	at	tataatt	at						480	
aactgtgttt	aatgtctgt	taccactaa	ctat	accaca	gctcc									525	
<210>	21														
<211>	633														
<212>	DNA														
<213>	Homo sapiens														
<400>	21														
tttacaataa	gcaaagg	tg	cagcaaccc	agtgtcc	act	gacaggat	ga	acgggt	aa	ac				60	
aaaacatgg	atatacatac	aatgg	aaata	ttat	tagcc	ttaaa	agg	aggaa	att	cc				120	
gacacatgct	acaatattat	gtt	aaat	caag	tcacaa	aaga	aca	aaat	act	gtat	gtat			180	
ttcatttata	ttaagtactt	agg	tt	ggtag	cc	aatt	cat	aga	cac	aca	agg	tg	gg	240	
ttgccaggag	ctggggcag	ggggaa	acgg	gagttat	cgt	ttaa	tagata	gga	agtt	ca	aa	tt	ca	300	
gtttggaaag	atggaaaa	aaag	ttat	ggag	at	gtat	gg	gac	att	tg	ca	aca	atata	360	
aatatacgta	atgccactaa	gctgtata	act	taaggat	gg	taaa	atag	ta	gtt	taat	gt			420	
tatataat	taaccacagt	ttt	aaaaat	cca	act	tag	at	ttc	att	tg	tt	aa	gt	480	
ttctgtactt	tctgaaataa	aaag	atgttc	aag	cc	ttt	tat	ttt	cc	tt	gg	cc	tact	540	
cctgctgcta	gccatttct	caaga	attct	tag	ttc	c	ttt	tag	act	at	ttt	aa	gact	600	

00069US1.ST25

accaagatct ggacactaga catgctcatt gct 633

<210> 22
<211> 505
<212> DNA
<213> Homo sapiens

<400> 22
cttctgcctc tttttacat atttctattt ttaaagtttg tgagtcaaag aagtttcac 60
atatacctaaa tgcttattgg aatatgtata attacatttg gaatgttcat gcatacactt 120
ctgtttttt gttttctta gaggaaaagg tgtatttcc tccattgatt tgtgtaaatt 180
ttttttcaaa agcttaataa gtatttatt ttgtttctgt tcattttat ggcatttagga 240
caatttaata atattcccag tgtaagaaaa acctcttctt tcagtatagc aaaatccaaa 300
taattgaaaa gatitttattt gtttcatgt ggagaaaagag gtgagtcctc cgattttatg 360
aatctctta gtgcagtagg acattaaatt tgctcccctt ttctacttct tgccatcact 420
aaccaattgc caaatgacac atttcctgt tttgtttccc cagaagctat ctgcatttt 480
aagagcatct gtatttgtat ctgc 505

<210> 23
<211> 636
<212> DNA
<213> Homo sapiens

<400> 23
cccacaaagtgc tcaaaggaaa aacgaaataa gaattcatttc aataaaacag gccttaaaga 60
tgaattttt taaaaaaagg tagaataatg ttaacatgga aagtgaaata gagagacaaa 120
attgagaact aggcaaaaca ttacagagtt accaagttaa ccataaaggg aaaggaatgt 180
agtaatggca aagagaaaaat ccttgagata attactctga attcagaaaa aaaaaaaaaagg 240
agacaaggaa taatcacaga gttgatgaaa aagatggaag gcagagatga tacaacatag 300
gaataattgg tttcctttaa ttagggaccc atactaatgg aacagaaaata agtttacaga 360
aaactttcc ctaaaggaaag gaagaaataa actatataatt gaaatgacgt gtggtatata 420
agaaaaaaaaac tgattgataa agaagaattt acatggaaac ctcacttcaa ataaaatctg 480
aagaccttca attgcctcaa agcccaaggt gacacatatg tccattgcct ctgtgacttc 540
atctcatatt tattcttggaa agaactcaact cttcactggc catgcttatac ttcttgctg 600
tcactcaata tgtcagtgac aataatgccc atggtc 636

<210> 24
<211> 578

00069US1.ST25

<212> DNA

<213> Homo sapiens

<400> 24

atagtcaaac	caaaactgta	tatgtacttt	aactcccatg	gtttcccatt	cattaagcag	60
aaattgaatg	tggaaaggc	caaataattct	attttctcc	acctaccttc	cttttcagg	120
gtgattttct	tttagtgg	agaatgggtt	ctggaaactg	taaaaggcag	aaaataatat	180
ttatTTTact	agtgcgttc	tgccttcat	tggttcccct	agctaagatt	gactgtcatt	240
gatatttatg	aagtggcat	ccaaatgctg	actccattgt	gcaaaaaaca	gagagttta	300
agagaacttg	taggatagaa	attcactta	gttggactc	tctaaattct	ctcctcttaa	360
ctcttgcc	caatagtaca	ccacaatttt	cccccttcat	caggtgacct	cittgcataa	420
aatatttaaa	agaaggcctt	atgccttagca	agagtccacg	tggcctactt	tacatacaaa	480
aaactcaaag	attcttattt	tgtcaattct	ctttccttc	aaaaaaaaaa	taatgagagg	540
aaaagaaaatc	tggcacctca	ttggcagaga	tcacctgc			578

<210> 25

<211> 727

<212> DNA

<213> Homo sapiens

<400> 25

attatgacag	ttgatcctca	taacaacctc	tggagctaca	tactgggtgc	tgttgttatt	60
ctcactttac	agatgagtaa	actgaaggta	agaaaagtgg	agtgcggcg	ccagggttgc	120
aaagcgagga	agtggtggag	ctgggattgg	gtgtgccaca	gtctcttct	ttgggcagac	180
tgaacatgcc	taggctccta	atgattctgc	tatcttcctt	cctttccctg	agccccgggc	240
tgtgcaacct	gtggccagct	ttcctgacgg	ggtacatctc	aaccctaccc	catccctgaa	300
agaaggggca	acacgcaaca	cccattcact	ccctcccaa	tgctggca	gtgctgggg	360
ctgggctgtg	atggtgacgg	tccctgcct	cgcaaaggat	actgtgtatg	ggcactgcgc	420
tgtgatgtgt	tggctgtcat	aggcacacgc	aggaggaga	cagggtgag	gaagtggaga	480
gagtgagaca	ggcaaaggga	agcggaga	gtgttccagg	tagagggaga	gtctgagcag	540
aggcccagag	actgaagaga	caggcacatc	tgagaagctg	aaggaggtcc	agtgggtacg	600
tgcatcagga	cgcacatgg	gaggccctg	gggtgggg	atgaaaggtg	ccaaagagac	660
tgaatggcca	cacagagcac	actgaagcca	ctacagttgc	atattcagaa	atgcctgagt	720
tccttgg						727

<210> 26

00069US1.ST25

<211> 721
<212> DNA
<213> Homo sapiens

<400> 26
caaatacatt cagaaaactc tgtacttaat tcacctctt aggactata atacatatta 60
gcacagtcaa gacactgaga aagtcctgca gtaaataaaat gtggtttatg ttatataatc
cagtgttta atattaggc acttttgcta aattactgtg tggtaacgaa taacctcaaa 120
atcccagtgg cttataacca caaagggtga tttgttgctc atattcgta tcagctgtgc
tttggctctg ctccagatgt ctttttcatt tcagatgttag gctaaagggtg cagcctttt 180
tcaggaatat gccattctta tgataaaggg aaaagagcaa aagccatgcc agacaatgtc
tcctaaagtgc tcttgcccaa atgtgtcatg taccgtgtct ctcacattcc attgtccaaa 240
gcaaatacaca tggacaaggc caatgtcact aaaatggaaa gtcacagagc ctccccacagt
gcagtgtgc cagtcacatg gaaatgcact gtatgtataat aatcccttta gaggaaacga 300
acaataatgt aataatgaaa tctgccacaa aatacactta ttttacacc aaatctttt 360
ttaatttaat taccatatga ttcagcaatt ttactcttaa gtatataattc aaaagaactg 420
tagacaagca ttcaaatgaa aacttgtaat gaatgttcat agcagcacta ttcatagtag 480
t 540
721

<210> 27
<211> 680
<212> DNA
<213> Homo sapiens

<400> 27
atggaatgaa tgaatgaatg cattgaaagc ctacttaccc aaaatctctt atatattcaa 60
atgattaatc aaagatctt cattcaacaa aatgaactga gtgcatttag aaggcattgt 120
ggggtaagg agatgtggcc ctttcctctc tggagcttag agtctgtctc caccattgaa 180
tctgaaaagc tagccaaata catgagtaaa aaaattaaaa tccaaatctt ttaccaatata 240
aacatcgat gacatggctg taatgatcaa ataattaccc gattcttcc gattcggtt 300
taaatgttaa acattcagtg atggtaaca tactcgctga tgtgaaaggg tgggggctga 360
ctcattactg gggctaggac aaggccaaat cgtggctcag aactgtcatt cagagcctct 420
tgtttgtctt ctgttagtcag ctcagtcaca gtaaggatgt tggttctct caacatgtca 480
ttcttgtttt atgtactcaa atgcttcatt ctcattgtca acatctgctc tgaactttaa 540
gtcaggccca cttgtttgtaa gaatagctca ttgacataaa gcaaataaca catcccagcc
agtcaaatcc aagaaaactca gctttaaaaa cacattgtt ttaaagaatt tcactgcaaa 600
660

tccattcatt atgtttacct

680

<210> 28
<211> 331
<212> PRT
<213> Homo sapiens

<400> 28

Cys	Thr	Cys	Thr	Cys	Thr	Thr	Ala	Thr	Gly	Cys	Thr	Cys	Thr	Cys	Cys
1				5				10					15		

Ala	Gly	Cys	Ala	Ala	Ala	Ala	Thr	Ala	Ala	Cys	Thr	Thr	Cys	Ala	Gly
							20			25			30		

Thr	Gly	Ala	Cys	Thr	Thr	Thr	Ala	Thr	Cys	Ala	Gly	Ala	Ala	Ala	Thr
				35				40			45				

Gly	Gly	Gly	Gly	Thr	Thr	Thr	Ala	Gly	Ala	Cys	Ala	Gly	Gly	Ala	
							50		55		60				

60	Thr	Gly	Thr	Thr	Thr	Cys	Thr	Thr	Gly	Gly	Thr	Thr	Ala	Gly	Ala
	65					70			75				80		

65	Thr	Thr	Gly	Gly	Thr	Ala	Thr	Cys	Ala	Thr	Gly	Thr	Gly	Thr	Cys
					85			90			95				

70	Thr	Thr	Ala	Gly	Gly	Thr	Ala	Thr	Thr	Ala	Thr	Ala	Thr	Cys	Thr
					100			105			110				

75	Thr	Thr	Ala	Thr	Cys	Cys	Thr	Thr	Ala	Ala	Cys	Cys	Ala	Thr	Ala
					115			120			125				

80	Cys	Ala	Cys	Ala	Thr	Ala	Cys	Thr	Thr	Ala	Cys	Thr	Thr	Gly	
					130			135			140				

85	Gly	Gly	Thr	Ala	Ala	Cys	Cys	Thr	Thr	Ala	Gly	Thr	Ala	Ala	Thr
					145			150			155			160	

90	Ala	Ala	Gly	Ala	Thr	Cys	Thr	Thr	Cys	Ala	Ala	Thr	Thr	Ala	Gly
					165			170			175				

95	Cys	Thr	Thr	Ala	Gly	Ala	Ala	Cys	Thr	Thr	Gly	Thr	Ala	Gly	
					180			185			190				

100	Ala	Thr	Ala	Thr	Ala	Gly	Ala	Ala	Ala	Gly	Cys	Cys	Ala	Gly	Ala
					195			200			205				

105	Gly	Thr	Cys	Cys	Ala	Thr	Ala	Thr	Cys	Thr	Gly	Thr	Thr	Gly	Thr
					210			215			220				

110	Gly	Gly	Gly	Ala	Cys	Ala	Ala	Cys	Thr	Cys	Ala	Gly	Ala	Cys	Ala
					225			230			235			240	

115	Thr	Cys	Cys	Ala	Thr	Cys	Thr	Thr	Cys	Cys	Ala	Thr	Thr	Gly	Ala
					245			250			255				

00069US1.ST25

Cys Thr Ala Thr Ala Thr Thr Thr Gly Ala Gly Thr Gly Ala
 260 265 270

Cys Thr Thr Thr Thr Cys Gly Thr Ala Ala Thr Thr Ala Gly Ala
 275 280 285

Cys Thr Cys Thr Cys Thr Ala Cys Cys Thr Thr Cys Ala Ala Ala Thr
 290 295 300

Thr Cys Ala Gly Cys Thr Thr Cys Thr Gly Thr Gly Gly Ala Thr
 305 310 315 320

Cys Ala Thr Thr Gly Ala Thr Thr Ala Ala Ala
 325 330

<210> 29

<211> 610

<212> DNA

<213> Homo sapiens

<400> 29

agctgagcag agtctatgca ggcccattgg ctgccttagcc agtgggtgatc ccgcctccac 60

cctcatttct tctttgttaa gaaaaccatg acctcattaa atattggaca cctataaacc 120

tcagggacct tggtgccagcc tccccgccac gtattggtaa gtctaagtca actctggta 180

tttcattcct ctggacattt attgcttgag gcttgggcat gagctgcctc ttcatctgag 240

cctgagccac aggtgccctc tgcacttacc acactgatgc actgcgccag ggagagct 300

gtctcgatgg agatgagctg tgaggagctg gtggctgggc agatcagggtt gttgtAACGG 360

gttttggtaa gaaggtcgtc catcagcttc tgctcagcat gagccatgcg gcagtcct 420

gggttaaacac acagacatgc tggcccttg tgcagctgtc ccacactgca gatgacagct 480

acaaaggcagg agccaagagg gccaggggag cacaggcacc ccggggccg gctgaagcag 540

tgaagggtgt ggcggaccag gctctccctg gggacttcaa atgacattca tgacagagct 600

cagctacttt 610

<210> 30

<211> 614

<212> DNA

<213> Homo sapiens

<400> 30

tctgcaggcc cattggctgc ctagccagtg gtgatctgc tcccaccctc atttcttctt 60

tgttaacaaa accatgaccc tattaaatac tggacaccta taaacctcat ggaccctct 120

ccagcctccc caccgtgtac cggtgagtct aagtcaactc tagtcatttc attcctctgg 180

acattgactg ctttagggctt gggcatgagc tgcctttca cctgagcctg agccacaggt 240

accctctgca cctaccacgc tcatgcactg ggccagggag agcgccgtct ggatggagat 300

00069US1.ST25

gagctgttag	gagctggtag	ctgggcggat	cagggttggta	taacagggtt	tgttcagaag	360
gtcgtccatc	agtttctgct	cggcatgggc	catgcggcag	tcccctgggt	aaacacacag	420
acatgctggg	cccttgtca	gctgtctccc	actgcagctg	acagctatga	agcaggagct	480
gagagggcca	gggagcacag	acaccctgag	agctggctga	agcagtgaag	gtgctggccg	540
gcctggctt	ccctggggac	ttcaaattgac	attcacgaca	gagctcagct	accttcctccc	600
catgccatac	ctct					614

<210> 31
<211> 198
<212> DNA
<213> Homo sapiens

<400> 31	ctgtgaggag	ctgggtggctg	ggcgatcag	gttggtaaa	cagggttgt	ttaggaagt	60
	gtccatcagt	ttctgctcg	catggccat	gccccgtcc	cctggtaaa	cacacagaca	120
	tgctggccc	ttgtcagct	gtctccact	gcagcttgc	agctatgaaa	gcaggagctg	180
	agagggccag	ggagcaca					198

<210> 32
<211> 540
<212> DNA
<213> Homo sapiens

<400> 32	agctccatct	cgtggagat	gagctgttag	gagctggcgg	ctgggcggga	ttaggttgt	60
	gtaacgggtt	ttgttcagaa	ggtcgtccat	cagttctgc	tggcagggc	catgcggcag	120
	aaccctgcgt	aaacacacag	gacctgttg	gtccttgtc	agctgtcccc	cactgcagct	180
	gacagctatg	aagcaggagc	tgagagggcc	agggagcaca	gacaccctga	gagctggctg	240
	aagcagtgaa	ggggctggcc	ggcctggctc	tccctggga	cttcaaattg	cattcatgac	300
	agagctcagc	tacctcctcc	catgccatac	ctttcctcc	tcctcctccc	tcaatcaatg	360
	aacagcatcc	cacgctctac	acatctgata	caaaactggg	tatctttcc	tgaccctcc	420
	cttggttcat	ataagtggcc	accaagtcc	gtctgtcctc	ccatctccac	ggctacagcc	480
	atgtccctgc	ctcccccgcc	ctgcccacct	tctattctct	ccacctgcac	cctgccccctg	540

<210> 33
<211> 334
<212> DNA
<213> Homo sapiens

00069US1.ST25

<400> 33
 agacacccag tttgtatca gatgttaga gcgtggatg ctgttcattt atcgaaggag 60
 gaggaggagg aagaggtgtg gcatggcg aagtagctga gctctgtcat gaatgtcatt
 tgaagtcccc agggagagcc tggccgcac gcacccatcac tgcttcagcc ggccccccggg 120
 gtgcctgtgc tccctggccc tcttggctcc tgctttagt ctgtcatctg cagtgtggaa 180
 cagctgcaca agggcccagc atgtctgtgt gtttacccag gggactgccc catggctcat
 gctgagcaga agctgatgga cgacccatctg aaca 240
 300
 334

<210> 34
<211> 680
<212> DNA
<213> Homo sapiens

<400> 34
 tcttattttt ccaatgttagt ttctagaacc gttagcacag aaagttataa acattgtata 60
 attatttcattc taaaatgaatt gtaataataa ctacaaaaaa ttatgtctac tggctgttaac
 ataacttagt aattattctg tttgtatgtt ctttaggttagc ttccagaggt ttatggctaa 120
 atgatctcta ataattatttc ttattttcaa atttaaatgt caattgctga atatatacat 180
 acaataaagg ctttataact atgtgttata gtttgctagg aatgtcataa caaaatacca 240
 tagactatgt gtttaaaca gcagaaatgc atttctcac agcttcaaaa aggctctaag 300
 tctggtatca aggtgttagc aaatttggtt tttcctaagg tctatcttct tttctttcag 360
 atggctgcct tcttcctgtg tcctcacatg ggctttctc tgtgcataatg catcctgtgt 420
 ctatgtccaa atttctttt taaaataatg acccagtcata actgaatgaa ggtccactca 480
 tatgatttca tctaagctt attaccactt tagaggccct atttctaaat atggtcataat 540
 tctgtggaac tgagaattag ctcttcaaca tatgaatttt gggggacaaa attcagcata 600
 tatttcctga tacatagagc 660
 680

<210> 35
<211> 619
<212> DNA
<213> Homo sapiens

<400> 35
 ttcaatctgc aatgtccttg cactgaccag ggctccattt cctttatcag aggctatgat 60
 ggaaatgatg tgggagttca cctggctgag acggaatgac tctgtgcata ggcgtggaaac
 cctgtggctt gcttagtaca ccataacaatg gtatttcacc ttggacacca gattgcagca 120
 ggagacaggt aactcatgtg acaattttt ttttttaatt tttaccattt ttttcgtaga 180
 240

00069US1.ST25

tattcctagg ccagttctaa gagttgttt ctgggagat tagtgctgga ggccagaagt	300
ctgagatcaa ggttggttt ttctgaggcc tcttccttg gcttgaaac agccgtttc	360
tccgtgtctt cacatggtct tttgctctgt acctgtccaa atttcctttt cttataagga	420
catcaacttgt ataagataag ggtttcccc tcatttaac ttaattacct cttaaaggc	480
cctatctcca aacacagttt cattccgagg tactgcaggt cagggcttca gcacatgaat	540
tttggcaag gatggagagg gttggaaaca atacaattca ccccgtaaca ccagatctga	600
ctcctctcac tagcctct	619

<210> 36
<211> 605
<212> DNA
<213> Homo sapiens

<400> 36
atgcctgct ctggaaagcat gcaaagtggaa ccaaattcag tccaaaggtc tgggagtaaa 60
tttagctctg ccacttactt gccttgcac ctggacaat gatcatctat aaaggagtga 120
tgagaaatag tactacttct ttgttatatg ttgtgtgtgt gtgtttgcg tgtgcgcgc 180
tgtgtgggtg cgctgttttta aaaagctaag aaatgcaaaa gggtaaaaag cgctaaac 240
gggctcaaga ggtgctcagg gaaagctgat tgtcagtcaa aaagtcaaac ctgcacgttt 300
cctaccacca ctgctggta gcggtagcgg gcaatgactc ttcgggtct cctgtgtcgc 360
ctaggctggc gccgaggtcc tcgactgttag aaaagatagt tgatgttagac atactccagc 420
aaggacagga acacaaagaa caagcacacg aggatataga tatcaatggc cttgatacag 480
gaaatgttgg ggagcttac ccgcagatgt gagtcgatgg tggtcaggat gaggattgaa 540
gttaaggctg taagcaacac agtacagact tagtctcctc tgatggctaa cgttcttggc 600
aacct 605

<210> 37
<211> 667
<212> DNA
<213> Homo sapiens

<400> 37
aaacattcaa actgtatcag aggccaaaggc agttccaggg tgagtgaaca gcagtgtcaa 60
atactgctca ggtcagagct ggtgtggcca gtgaactggg aaatttaaca tcagaggggg 120
caatcttgcac tttcctcaaa gcattctcag tggagtggta ggagtagggag tgaggccag 180
aagatttggg gatgagtgag tggctgagat gggaaaacag caagtgtaga aaactcatac 240
aagtttgggtt gtgaagtgcac agaaagagta gctagagaag tggaggatt ttccttagct 300

00069US1.ST25

ggtagagatc cagggatgct ccattgctta tgaggggaca gaaaaagaggg gaggggttcaa 360
 gatatggat gaatgacagg gaagaaagca ttcccaaaca cagaggaggt cccccaaaat 420
 ggatcctgat acaggttaagt gaaaaaggttt gtggcagaat gttgagaaac catccattca 480
 atggcttctg ttttagtctct gatatgaaag acaaagtac ctgcccagat ggtgaaaag 540
 atagtggat agaaaactgg aaaaaaaaaaca aaaaaggaa aaaggtttga aatagccttt 600
 gagaagcatg aagagagagc tggaggcttg ctgaactctg ctgagagcca gtggaagctg 660
 gagactg 667

<210> 38
 <211> 518
 <212> DNA
 <213> Homo sapiens

<400> 38
 cttttaaaca cagttggac actaccatta aagaggaatc ttcatcacta aaagtaaggt 60
 aattttgtta gaaaatgcaa atcctaacac aaaaaatcgg atcaaaggta aatcacaaat 120
 aatgtttgag gtacaaagaa tctaccactg tggaaaattt caggccataa taaaccactc 180
 tttacacagg ggatccaatg ggagacattt gaaaaacaga aatacacttt tcttggtag 240
 caatgttagg tactccagtt tcatacttaac tttgtctttt gttatgggtc tcaagcgtcc 300
 ctatttctgt aaacaaacac ataaatattc aaaagagtat ctctaagtaa gttgaggttt 360
 ataaaaataga aatttttctt tttaacatac cgaggcttta ttttttagct ttctgtcttt 420
 agtagcagtc ttccctttt ggttgcgtgt aaaataatgc aaggttccat attccatcaa 480
 gggctgcaaa aacaaaaatg aaacaaacag aaacaaag 518

<210> 39
 <211> 617
 <212> DNA
 <213> Homo sapiens

<400> 39
 ctctatgttag ccccaactaa acatgtctgt gggcttagatt agccctttgg ccagctggcc 60
 accagttgac catttctgtt gacaagattc tcagaaaggc aaccacagcc tcaacttttta 120
 caggattatt ttctacctaa agaggcatgt gcataaatgg caggatgccc agcacacctc 180
 attttactgt gtttcacttt attgtacttc acaaataattt catttttaa caaatggaaag 240
 gtttctggca accctgtgtc aagcaaattt atcagtgcca tttgtccaaac agcatgcgt 300
 cccttctgt ctctgggtca cattttggta atttttgcga catttcacag tttctcatta 360

00069US1.ST25

ttattatatac tggttatggtg atctgtgatc agtgatctt gatattccta ttctaattgt	420
ttcagggagc cacaactgt gcccatataa gatggaaaac ttccaataaa tgctgtgt	480
gttctgactg ctcatcaactg attggctgtt ccctcatctc tcttcttctc ctagggcctc	540
cctattccct gagagacatc aatactgaaa ttaggcaat caataaccct acaatggcct	600
ctatgtgttc aagtcaa	617

<210> 40
<211> 670
<212> DNA
<213> Homo sapiens

<400> 40	
tccagctcag aaactaccag cttcatcaa catgctgagc ttagggcat ggatatgtgg	60
agagcaggag cctcagtggt gcccttgtgt ccccagtctt ggctggacac tcgcctggcc	120
tggAACACTA gtgcacaccc gcggcacGCC atcacgctgc cttggagtc tctctggaca	180
ccaaggctca ccatcctgga ggcgtaagtg agacagttcc tgccccagga atctgccatg	240
catagccctc ctttccccca tctacaacct agaggctgtc tgagtgaata tgaccctct	300
ggcggtcccc gccggactag cagtgcacct tcactgcctc gaattccccct cccactgcca	360
gaactctgaa agcagctggg gttgggttg ggatgccagg gtctcccccc ggccccgtcc	420
aagaaggggc tggggctctg gctgtgggtgc cttccccac aggctctggg tggactggag	480
ggaccagagc ccccaggctc gagtagacca ggacggccac gtgaagctca acctggccct	540
caccacggag accaactgca actttgagct cttccacttc ccccgccacc acagcaactg	600
cagcctcagc ttctacgctc tcagcaacac gggtgctgac agggcagggg ctgcagggtt	660
gaggagggga	670

<210> 41
<211> 652
<212> DNA
<213> Homo sapiens

<400> 41	
aggccatggc aacctgagcc tctggcttg ctgcaagggg ccgagccact gcagtcgcca	60
tggctgtgga gggcagttgc tctggggagg acagaagact gatgtgctcg gacctctggg	120
attgcagagc tgctgcgaat gtttgagtct gtcaccctag agagggccccc tgaggctacc	180
gctgagcaca gagatggct gccactcgag tggggggcgc agtggagag caggtgctgc	240
ccgcctaagc ctggggtaga ctgctctgaa cacagatctg ggagttcgcc ttctgtctgc	300
ctttgccccct tccccccttgcc ccgcaccctg cccctgcacc acagacctgg gagttccccct	360

00069US1.ST25

cccccacctt cctcctcccc tcctcaaccc tgcagccccct gccctgtcag cacccgtgtt 420
 gctgagagcg tagaagctga ggctgcagtt gctgtggtcc cgggggaagt ggaggagctc 480
 aaagttgcag ttggtctccg tggtgagggc caggttgagc ttcacgtggc cgtcctggtc 540
 tactcgagcc tgggggctct ggtccctcca gtccacccag agcctgtggg gaaaggcacc 600
 acagccagag ccccagcccc ttcttgacg gggccggggg gagaccctgg ca 652

<210> 42
 <211> 680
 <212> DNA
 <213> Homo sapiens

<400> 42
 aattatagaa aatccaaata tcctggctgg ggtgagagtc tgtaagctag ccagagaaaa 60
 cagctaaggc taagaaaata aaatatagga gaaaattcta gaaaatccag atatcctggc 120
 tgggtgaga gtctgttaagc tagccagaga aaagagctga ggcgaagaca ataaaatata 180
 ggagaaaaatt cttagaaaaat gaaaatttgtt ttattgtccc agatctgtac ctttctcccc 240
 ctctgattgt tcacttgatt ttagatggtg aatgacaaat attggtaag aaaatcattc 300
 catgaaacac tggtaaccat ttgtccgaaa cgcccttcatg gcagcaactgc cgtggctcag 360
 tacattgcac ctgcacttcc aaagtgaagg tgactgttac ctgaaaccca tgtgcctggc 420
 acacatgacc agccttggac acaagaggcc tttgatcaga aactgggagg cactcccaca 480
 ttccccacaat gaaattccgt ggggcctgt accctgagtt catccaacac atggttactg 540
 atcatgttagg gtgtaccagg ctatgtcaga cgtagagac accatgaaga gcaaacagtt 600
 agcttatggg gagtgccctaa cgcacacctg ccatttacat ctttgcctc atgattctc 660
 ccactgaacc aatggcactg 680

<210> 43
 <211> 559
 <212> DNA
 <213> Homo sapiens

<400> 43
 atgtctcttt gttaattag ttttgggtgg ctcaattttt aggactattg ttccctgtttt 60
 tctttcctca gtttaatttgc ccaatttaag ctctggacaa aatctgaaaa tttacaactg 120
 gaattttaca agaaggcctc gtattataaa gtttgggtgt tgggttggta gacttgggtt 180
 gtggacagtt tgaataaggt tttcatagaa aagcatcagt gaaagaaaaga aaataaaaata 240
 tattttaaag taactttcct cttccaata aaacttctaa aagtcaatac atatgacttt 300

00069US1.ST25

ttcaaaaaca taaaaaaaaa tgccagatat agggctttc acccaaagat taaaataagt	360
tttttttaaa acaaacaac aaacaaacaa aaagaacata tggctgaaat aaaagtgcct	420
cttggtagaa tatgcaatga aagtgttagt tgggtccaga gaaacagttg tgtcagaca	480
tcaattctca ggagacaatg aggagtgaag caaacaagat tgaatggcgg aaagttgaag	540
ggtgatactg ttgaaatag	559

<210> 44
<211> 648
<212> DNA
<213> Homo sapiens

<400> 44	
ctcatttcata gattactttt ttcattaccc ttgtgccata taacatctta gctgtgtgag	60
accaggaga aaggtgttgg tcacctaccc ttggcagtag gaagtcttc agatctgata	120
ttaatttgtt attcaaatgt caaggtatcc tagtacagaa aatatcagtg ggttattctg	180
ataaggaaaa tactatttgc taattttaga aaagagaata tgctaaaagt tacacctcag	240
aggaaatatac atttgatatg gtgaacagga aacccaagaa gttgtgaatt ccattcaaaa	300
gatgaaactg cttagaagat aatgtaaggt tctcacccaa catgagcact gcactcaagg	360
ccattttctag gatgaaaggg tggatgatt atctattatt ccagccatga attatttctg	420
tggcctccag aagatgcaac tgaattgttag ctatgtgtcc agaatcggtt cttctgggt	480
ggttcttggc ctcgctgact tcaagaatga agccgtggac ctcacggtg agtggcag	540
ttcttaaaga tgggtgtgtct ggagttgtt cttcagata ttcagatgtg tcccgagtt	600
tcttttttctt ggtgggtttt gtggtcttac tgacttcagg agtgaagc	648

<210> 45
<211> 585
<212> DNA
<213> Homo sapiens

<400> 45	
agcagtggca tgataggttc attccttggaa gtctattgtg tgtgtttggg gccccgtaaa	60
atattagaaa gcgatggaaa ttttagggct ccgtataata ttgtatattac ataaccactc	120
agctctcaac tactctcaaa gagtacctac tgaagatcat gtctcaact tgctaaggct	180
gatctgggta ttagccaact ctctgagttg aaggaaacag atgtaaccag gtcatctcat	240
gaaatggagc tctattgttc agtagatgag gtagtaagtg gagcagacac tgctgtttgc	300
cttctccctg gctaacagag gactgacatt gactggatta aaggatagag ctaccctgta	360
cttcaggcgg ctgcatttcct ccctgccggc accagtgatt gatttagaa tggtagagg	420

00069US1.ST25

gtgcaattct	gaccaatgag	acgtggaga	agcttgcgg	ggagttggtg	gggtatttc	480
cttttgcctt	aaaaggggca	aaggaaaggt	acattccctt	ttttttcctt	tttcatctc	540
tggatgtcat	tgcctgaaac	tttgcaggc	ttctgataacc	atgag		585
<210>	46					
<211>	642					
<212>	DNA					
<213>	Homo sapiens					
<400>	46					
cccagcagaa	cataagggtt	tggctggac	atgaatgcac	cccagggagc	actgaactgc	60
tctgagctgc	cgacttagggc	cataggctag	ctatgtggc	ccatattgag	gtaggggctg	120
agcagtccca	gcggcacccgc	ccaggctgcc	tgctctgggg	tccctgaaaa	agccgcccgt	180
gagcccacgg	acttccgggt	cgtaagcaca	tggggcctga	acatctgctt	ggctgggtca	240
gctgctatga	caatgcccg	gcgatcgtgc	cctccagcgc	tgcctgcatt	ccgaggagga	300
agcgagtccc	cacgtgaata	atcgggctcc	gccggctcac	agcggatgtc	agaagggtca	360
gtcgctctgc	tccttcgccc	tccgttttc	ttcctcatgg	aaactttctt	cagctgcaga	420
aaaagctggt	cctttcttt	ctgcctggcc	cacagcttct	cctgcaaaat	caaaatttgt	480
tccttcggtc	tcctctggtg	acattctctc	ttccatctcc	tttctttcc	ttcgtctgt	540
cttcctccat	cttctcgcca	tcaccttatac	cgccgcctcc	tcttcctct	cgccccgcag	600
cctgcgctcc	cggcgggggc	gctccggaca	cactgtctgc	gc		642
<210>	47					
<211>	657					
<212>	DNA					
<213>	Homo sapiens					
<400>	47					
ctttttctgc	agctgaagaa	gtttccatga	ggaagaaaaa	cgaggcgaa	aggagcagag	60
cgacctgacc	ttctgacata	cgctgtgagc	cgccggagcc	cgattattca	cgtggggact	120
cgcttcctcc	tcggcatgca	ggcagcgctg	gagggcacga	tcgcccggc	attgtcata	180
cagctgaccc	agccaagcag	atgttcaggc	cccacgtgct	tacgaccgg	aagtccgtgg	240
gctcagcggc	ggctttgca	gggaccccag	agcaggcagc	ctggcggtg	ccgctgggac	300
tgctcageccc	ctaccta	atggggccac	atagctagcc	tatggcccta	gtcggcagct	360
cagagcagtt	cagtgcctcc	tgggtgcatt	tcatgtccca	gccacaacct	tatgttctgc	420
tggccactt	tcagcacacc	cagacagggt	tcctcttctg	gtgctgctt	gtctttgaaa	480

00069US1.ST25

ccgcagatag accatgctaa ccagcacaca ggttccctg gtccatcctc cctgacccc 540
atgcatgcc aggctctgca tccaggccct agactccttg cctaattcca gctccccg 600
aagatgcagc cagcaggaac gtcttagttt tgcatgtacc aaccaaccag gccctca 657

<210> 48
<211> 446
<212> DNA
<213> Homo sapiens

<400> 48
tctgaagctg ccgtgtatga acatacatct acacatacac acacacacac acacacacac 60
acacacacac acacacacac acacacacac acccccccgta gtgataaaac tatgtaaatg 120
atatttccat aattaatacg tttatattat gttactttta atggatgaat atgtatcgaa 180
gccccatttc attacatac acgtgtatgt atatccttcc tcccttcctt cattcattat 240
ttattaataa tttcgttta tttattttct tttctttgg ggccggcccg cctggtcttc 300
tgtctctgcg ctctggtgac ctcagcctcc caaatagctg ggactacagg ggatcttta 360
agcccgggag ggagaggtta acgtgggctg tgatgcaca cttccactcc agcttacgtg 420
ggctgcggtg ggggtgggtg ggggtgg 446

<210> 49
<211> 554
<212> DNA
<213> Homo sapiens

<400> 49
tctatagctc ccaccctatt cacagaagcc tggtgatattttctgaccg tagcacttta 60
tagacaaccc agtagaagat attgaagatg aggaaagtga aaggaaagac agcccgggag 120
atggtgtcaa ttctcttggc tcagtcacg tagagttcc gcgtggtttc tccttcctt 180
agaagagggg ctggaggttg gggactataa atgccagaac cttccattgg acctccatct 240
cttgcctgca ggcagtggcc caagccatag ccacggaaat agaaacgact ttcttggatg 300
atatcttcct cctggattta caaggaagaa acggcagaat ttgaggtcaa agctcaaagg 360
cagagggata gagaacagac cacccatcaa tatctcatag ggaatgttat gcagacaagg 420
tgccttgggt acacaggccc attgcatgct ttttatggc acaacactac tcatgagata 480
gatgtatgct aagcagctct acgtgctata tatagtgtat gtcatgattc catggcagat 540
aggctctaag ctac 554

<210> 50
<211> 469

00069US1.ST25

<212> DNA
<213> Homo sapiens

<400> 50
tcattaattt attactaaggc actagtgaa atctaacttt atttacccccc atcaacttgg 60
cttgtgttac cagaacaaga aggcaaccaa acatgaaatg ctggggaaa tgaccacta 120
gactgaacgt ccaaataact tttgctgtta catactgtat gacagcggtt ctcaaaccctc 180
tgtgtgcaga acacccctga gaacttggta aaataacggt tcctgagccc cagcccagag 240
cgtatggttc agtagttgg gggtgagggtt ggagaatttg cattttagt aagttcccag 300
gtgataactgc tgctgccact ggtcctggac tacactttga ggagcctgct gaacacagca 360
cctcagcctc tacttgaagg acaaactagc ttcttactgg attcagtggc aagattaagc 420
ccactggttc tcaaacacaa tcccctggg aacaccagtg ctctaccac 469

<210> 51
<211> 445
<212> DNA
<213> Homo sapiens

<400> 51
tcagcatttt gttgccaagt tttctgagac ctctggccat taagccttca ctgggggtgt 60
ggtctgtctc tgaagtctac tcccattgca aatggatttt gacggtaatg gtcaacacgc 120
ctgggcaaag aatgggtcat gcccattctt actggaaaga tttggaacat ttccctgtaa 180
attgtatatt atttggattt atttctctaa ctgaatggac gttttctat atgttgccaa 240
atcttccagt aatgcttctc attcagtgtt attaaggaga taaaagtga cagcatttt 300
cttggtaat taatgatggg ttttacatt ttcactttc aaaaaatata atcaccactg 360
tgtttgcag aaacaatagt atgataaaat caaggagaaa tacaactaga gaagaggcaa 420
aaaaatctca atattatgtataa 445

<210> 52
<211> 60
<212> PRT
<213> Homo sapiens

<400> 52

Val	Ala	Ile	Arg	Arg	Pro	Ser	Leu	Tyr	Ile	Ile	Asn	Leu	Leu	Val
1														

Pro	Ser	Ser	Phe	Leu	Val	Ala	Ile	Asp	Ala	Leu	Ser	Phe	Tyr	Leu	Pro

Ala	Glu	Ser	Glu	Asn	Arg	Ala	Pro	Phe	Lys	Ile	Thr	Leu	Leu	Gly

00069US1.ST25

Tyr Asn Val Phe Leu Leu Met Met Asn Asp Leu Leu
50 55 60

<210> 53
<211> 26
<212> PRT
<213> Homo sapiens

<400> 53

Ser Ala Pro Trp Leu Ser Trp Gly Ile Leu Leu Ile Leu Gly Glu Gly
1 5 10 15

Ser His Ala Pro Thr Ser Phe Tyr Ser Arg
20 25

<210> 54
<211> 22
<212> PRT
<213> Homo sapiens

<400> 54

Arg Thr Val Pro Pro Tyr Leu Tyr Asn Thr Asp Val Trp Phe Phe Phe
1 5 10 15

Ile Arg His Tyr Pro Trp
20

<210> 55
<211> 33
<212> PRT
<213> Homo sapiens

<400> 55

Gly Gly Arg Arg Gly Ser Ser Leu Pro Gln Asn Pro Thr Gly Gly Pro
1 5 10 15

Ser Ser Phe Cys Gly His Cys Ile Ser Leu Tyr Ile Leu Pro Pro Gln
20 25 30

Arg

<210> 56
<211> 35
<212> PRT
<213> Homo sapiens

<400> 56

Leu Leu Leu Leu Gly Asn Ser His Tyr Val Tyr Asp Gly Leu Ser Tyr
1 5 10 15

Ser Val Phe Pro Ile Phe Phe His Ile Phe His Phe Leu Tyr Trp Ser
20 25 30

00069US1.ST25

Pro Phe Ser
35

<210> 57
<211> 37
<212> PRT
<213> Homo sapiens

<400> 57

Gly Asp Cys Arg Met Ala His Ala Glu Gln Lys Leu Met Asp Asp Leu
1 5 10 15

Leu Asn Lys Thr Cys Tyr Asn Asn Leu Asp Pro Pro Ser His Gln Leu
20 25 30

Leu Thr Ala His Leu
35

<210> 58
<211> 52
<212> PRT
<213> Homo sapiens

<400> 58

Asp Glu Arg Asn Gln Val Leu Thr Leu Tyr Leu Trp Ile Arg Gln Glu
1 5 10 15

Trp Thr Asp Ala Tyr Leu Arg Trp Asp Pro Asn Ala Tyr Gly Gly Leu
20 25 30

Asp Ala Ile Arg Ile Pro Ser Ser Leu Val Trp Arg Pro Asp Ile Val
35 40 45

Leu Tyr Asn Lys
50

<210> 59
<211> 27
<212> PRT
<213> Homo sapiens

<400> 59

His Phe Val Ala Leu Phe Ser Gln Asp Trp Lys Phe Val Leu Gln Ile
1 5 10 15

Leu Tyr Lys Leu Cys Leu Phe Phe Val Leu Ile
20 25

<210> 60
<211> 40
<212> PRT
<213> Homo sapiens

<400> 60

Leu Met Gln Val Trp Asp Asn Pro Phe Ile Asn Trp Asn Pro Lys Glu

00069US1.ST25

1	5	10	15
Cys Val Gly Ile Asn Lys Leu Thr Val Leu Ala Glu Asn Leu Trp Leu			
20	25	30	
Pro Asp Ile Phe Ile Val Glu Ser			
35	40		
<210> 61			
<211> 37			
<212> PRT			
<213> Homo sapiens			
<400> 61			
Arg Glu Pro Asn Ser Phe Phe His Asn Gly Ile Asn Ser Thr His Asn			
1	5	10	15
Thr Gly Trp Pro Asn His Leu Leu Lys Val Ser Tyr Leu Asn Thr Phe			
20	25	30	
Thr Met Thr Ile Lys			
35			
<210> 62			
<211> 52			
<212> PRT			
<213> Homo sapiens			
<400> 62			
Thr Leu Ile Glu Cys Ser Met Leu Asn Leu Val Asn Leu Val Leu Asn			
1	5	10	15
Arg His Asp Val Leu Ala Arg Ser Ile Phe Phe Gln Thr Thr Val Trp			
20	25	30	
Thr Ser Ile Thr Ser Glu Lys Gly Glu Leu Pro Leu Val Ala Ser Val			
35	40	45	
Thr Gln Lys Asp			
50			
<210> 63			
<211> 42			
<212> PRT			
<213> Homo sapiens			
<400> 63			
Cys Ile Ser Asp Leu Gly Ile Phe His Tyr Ser Tyr Gln Leu Ser Ile			
1	5	10	15
Ser Asn Pro Glu Asn Pro Lys His Ser Asn Glu His Phe Leu Val Ser			
20	25	30	
His Trp Tyr Ser Lys Asn Phe Arg Phe Trp			
35	40		

00069US1.ST25

<210> 64
<211> 57
<212> PRT
<213> Homo sapiens

<400> 64

Ser Ser His Val Leu Pro Pro Tyr Phe Pro Leu Leu Gly Ile Leu Pro
1 5 10 15

Arg Pro Ser Phe Phe Thr Arg Pro Val Thr Glu Tyr Thr Leu Met Arg
20 25 30

Pro Lys Pro Phe Leu Asn Ser Asn Ser Lys Ser Met Asp Ser Phe Phe
35 40 45

Leu Phe His Thr Tyr Ser Cys His Ser
50 55

<210> 65
<211> 97
<212> PRT
<213> Homo sapiens

<400> 65

Pro Glu Thr Asn Ile Gly Ser Cys Leu Glu Thr Ser His Ser Ile His
1 5 10 15

Ser Glu Arg Lys Leu Thr Gln Gly Pro Arg Gln Leu Leu Asn Pro Lys
20 25 30

Gln Leu Gln Glu Gly Thr Ile Leu Arg Thr Gln Pro Leu Ser Tyr Cys
35 40 45

Ile Leu Leu Glu Gly Pro Ile Ala Pro Val Ser Ser His Pro Trp Ser
50 55 60

Pro Ile Asp Ile Leu His Leu Tyr Ser Pro Pro Gln Leu Ala Leu Leu
65 70 75 80

Pro Arg Pro Lys Cys Lys Pro Leu Ser Val Thr Gln Leu Pro Pro Val
85 90 95

Ala

<210> 66
<211> 21
<212> PRT
<213> Homo sapiens

<400> 66

Pro Ala Arg Arg Ser Glu Arg Val Tyr Glu Cys Cys Lys Glu Pro Tyr
1 5 10 15

Pro Asp Val Thr Phe
20

<210> 67
<211> 85
<212> PRT
<213> Homo sapiens

<400> 67

Asn Ala Pro Ala Ile Thr Arg Ser Ser Cys Arg Val Asp Val Ala Ala
1 5 10 15

Phe Pro Phe Asp Ala Gln His Cys Gly Leu Thr Phe Gly Ser Trp Thr
20 25 30

His Gly Gly His Gln Leu Asp Val Arg Pro Arg Gly Ala Ala Ala Ser
35 40 45

Leu Ala Asp Phe Val Glu Asn Val Glu Trp Arg Val Leu Gly Met Pro
50 55 60

Ala Arg Arg Arg Val Leu Thr Tyr Gly Cys Cys Ser Glu Pro Tyr Pro
65 70 75 80

Asp Val Thr Phe Thr
85

<210> 68
<211> 42
<212> PRT
<213> Homo sapiens

<400> 68

Ser Leu Ser Leu Ala Gly Lys Tyr Tyr Met Ala Thr Met Thr Met Val
1 5 10 15

Thr Phe Ser Thr Ala Leu Thr Ile Leu Ile Met Asn Leu His Tyr Cys
20 25 30

Gly Pro Ser Val Arg Pro Val Pro Ala Trp
35 40

<210> 69
<211> 43
<212> PRT
<213> Homo sapiens

<400> 69

Gly Arg Leu Ala Leu Lys Leu Phe Arg Asp Leu Phe Ala Asn Tyr Thr
1 5 10 15

Ser Ala Leu Arg Pro Val Ala Asp Thr Asp Gln Thr Leu Asn Val Thr
20 25 30

Leu Glu Val Thr Leu Ser Gln Ile Ile Asp Met
35 40

<210> 70

00069US1.ST25

<211> 31
<212> PRT
<213> Homo sapiens

<400> 70

Ala Glu Gly Arg Leu Ala Leu Lys Leu Phe Arg Asp Leu Phe Ala Asn
1 5 10 15

Tyr Thr Ser Ala Leu Arg Pro Val Ala Asp Thr Asp Gln Thr Leu
20 25 30

<210> 71
<211> 43
<212> PRT
<213> Homo sapiens

<400> 71

Gln Ser His Pro Phe Leu Tyr Phe Ser Ile Cys Leu Ile Lys Gln Ser
1 5 10 15

Ser Phe Val Pro Leu Ser Ile Cys His Pro Ser Val Leu Pro Ser Phe
20 25 30

Phe Pro Gln Thr Ser Phe Tyr Ile Pro Ala Ser
35 40

<210> 72
<211> 69
<212> PRT
<213> Homo sapiens

<400> 72

His Tyr Val Tyr Leu Tyr Cys Cys Ala Asn Val Thr Thr Ile His Leu
1 5 10 15

His Asn Phe Phe His Leu Pro Lys Leu Lys Leu Pro Ile Tyr Thr Ile
20 25 30

Thr Pro Val Ser Pro Cys Pro Gln Leu Leu Ala Thr Thr Met Leu Pro
35 40 45

Cys Val Ser Met Asn Leu Ala Thr Leu Ser Thr Tyr Lys Asn His Thr
50 55 60

Val Phe Val Leu Leu
65

<210> 73
<211> 42
<212> PRT
<213> Homo sapiens

<400> 73

Phe Ser His Ile Leu Asn Ala Tyr Trp Asn Met Tyr Asn Tyr Ile Trp
1 5 10 15

00069US1.ST25

Asn Val Asp Ala Tyr Thr Ser Val Phe Leu Phe Phe Leu Glu Glu Lys
 20 25 30

Val Tyr Phe Pro Pro Leu Ile Cys Val Asn
 35 40

<210> 74
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 74

Glu Thr Asn Tyr Ser Tyr Val Val Ser Ser Leu Pro Ser Ile Phe Phe
 1 5 10 15

Ile Asn Ser Val Ile Ile Pro Cys Leu Leu Phe Phe Ser Glu Phe
 20 25 30

Arg Val Ile Ile Ser Arg Ile Phe Ser Leu Pro
 35 40

<210> 75
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 75

Phe Phe Glu Phe Gly Glu Trp Val Leu Glu Thr Val Lys Gly Arg Lys
 1 5 10 15

Tyr Leu Phe Tyr Cys Cys
 20

<210> 76
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 76

Glu Lys Leu Ser Ala Pro Pro Arg Val Ala Lys Arg Gly Ser Gly Gly
 1 5 10 15

Ala Gly Ile Gly Cys Ala Thr Val Ser Phe Phe Gly Gln Thr Glu His
 20 25 30

Ala Ala Pro Asn Asp Ser Ala Ile Phe Leu Pro Phe Pro Glu Pro Arg
 35 40 45

Ala Val Gln Pro Val Ala Ser Phe Pro Asp
 50 55

<210> 77
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 77

Trp	Gln	Ile	Ser	Leu	Leu	His	Tyr	Cys	Ser	Phe	Pro	Leu	Arg	Gly	Leu
1				5					10						15
Tyr	Thr	Tyr	Ser	Ala	Phe	Pro	Cys	Asp	Trp	Gln	His	Cys	Thr	Val	Gly
					20				25						30
Gly	Ser	Val	Thr	Phe	His	Phe	Ser	Asp	Ile	Gly	Leu	Val	His	Val	Ile
						35			40						45
Cys	Phe	Gly	Gln	Trp	Asn	Val	Arg	Asp	Thr						
					50				55						

<210> 78

<211>	37
<212>	PRT
<213>	Homo sapiens

<400> 78

Trp	Ile	Cys	Ser	Glu	Ile	Leu	Tyr	Lys	Cys	Val	Phe	Lys	Ala	Glu	Phe
1				5					10						15
Leu	Gly	Phe	Asp	Trp	Leu	Gly	Cys	Val	Ile	Cys	Phe	Met	Ser	Met	Ser
				20					25						30
Tyr	Ser	Thr	Asn	Lys											
				35											

<210> 79

<211>	23
<212>	PRT
<213>	Homo sapiens

<400> 79

Val	Leu	Asp	Arg	Met	Phe	Leu	Trp	Leu	Asp	Leu	Val	Ser	Cys	Val	Leu
1				5					10						15
Gly	Ile	Tyr	Ile	Phe	Ile	Pro									
				20											

<210> 80

<211>	54
<212>	PRT
<213>	Homo sapiens

<400> 80

Gly	Asp	Cys	Arg	Met	Ala	His	Ala	Glu	Gln	Lys	Leu	Met	Asp	Asp	Leu
1				5				10							15
Leu	Asn	Lys	Thr	Arg	Tyr	Asn	Asn	Leu	Ile	Cys	Pro	Ala	Thr	Ser	Ser
				20					25						30
Ser	Gln	Leu	Ile	Ser	Ile	Glu	Thr	Glu	Leu	Ser	Leu	Ala	Gln	Cys	Ile
				35				40							45

Ser Val Val Ser Ala Glu
50

<210> 81
<211> 50
<212> PRT
<213> Homo sapiens

<400> 81

Gly Asp Cys Arg Met Ala His Ala Glu Gln Lys Leu Met Asp Asp Leu
1 5 10 15

Leu Asn Lys Thr Cys Tyr Asn Asn Leu Ile Arg Pro Ala Thr Ser Ser
20 25 30

Ser Gln Leu Ile Ser Ile Gln Thr Ala Leu Ser Leu Ala Gln Cys Ile
35 40 45

Ser Val
50

<210> 82
<211> 34
<212> PRT
<213> Homo sapiens

<400> 82

Gly Asp Cys Arg Met Ala His Ala Glu Gln Lys Leu Met Asp Asp Phe
1 5 10 15

Leu Asn Lys Thr Cys Tyr Asn Asn Leu Ile Arg Pro Ala Thr Ser Ser
20 25 30

Ser Gln

<210> 83
<211> 30
<212> PRT
<213> Homo sapiens

<400> 83

Ala Glu Gln Lys Leu Met Asp Asp Leu Leu Asn Lys Thr Arg Tyr His
1 5 10 15

Asn Leu Ile Pro Pro Ser Arg Gln Leu Leu Thr Ala His Leu
20 25 30

<210> 84
<211> 18
<212> PRT
<213> Homo sapiens

<400> 84

00069US1.ST25

Gly Asp Cys Arg Met Ala His Ala Glu Gln Lys Leu Met Asp Asp Leu
1 5 10 15

Leu Asn

<210> 85
<211> 43
<212> PRT
<213> Homo sapiens

<400> 85

Asn Leu Val Phe Pro Lys Val Tyr Leu Leu Phe Phe Gln Met Ala Ala
1 5 10 15

Phe Phe Leu Cys Pro His Met Gly Phe Ser Leu Cys Ile Cys Ile Leu
20 25 30

Cys Leu Cys Pro Asn Phe Leu Phe Lys Ile Met
35 40

<210> 86
<211> 39
<212> PRT
<213> Homo sapiens

<400> 86

Glu Phe Thr Trp Leu Arg Arg Asn Asp Ser Val His Gly Leu Glu Thr
1 5 10 15

Leu Trp Leu Ala Tyr Thr Ile Gln Trp Tyr Phe Thr Leu Asp Thr Arg
20 25 30

Leu Gln Gln Glu Thr Gly Asn
35

<210> 87
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (33)..(43)
<223> Xaa is any amino acid

<400> 87

Gly Leu Thr Ser Met Leu Ile Leu Thr Thr Ile Asp Ser His Leu Arg
1 5 10 15

Asp Lys Leu Pro Asn Ile Ser Cys Ile Lys Ala Ile Asp Ile Tyr Ile
20 25 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Leu Glu Tyr Val Tyr
35 40 45

Ile Asn Tyr Leu Phe Tyr
50

<210> 88
<211> 42
<212> PRT
<213> Homo sapiens

<400> 88

Leu Ser Phe Ile Ser Glu Thr Lys Gln Lys Pro Leu Asn Gly Trp Phe
1 5 10 15

Leu Asn Ile Leu Pro Gln Thr Phe Pro Leu Thr Cys Ile Arg Ile His
20 25 30

Phe Gly Gly Pro Pro Leu Cys Leu Gly Met
35 40

<210> 89
<211> 43
<212> PRT
<213> Homo sapiens

<400> 89

Leu Phe Leu Phe Val Ser Phe Leu Phe Leu Gln Pro Leu Met Glu Tyr
1 5 10 15

Gly Thr Leu His Tyr Phe Thr Ser Asn Gln Lys Gly Lys Thr Ala Thr
20 25 30

Lys Asp Arg Lys Leu Lys Asn Lys Ala Ser Val
35 40

<210> 90
<211> 94
<212> PRT
<213> Homo sapiens

<400> 90

Leu Ala Ser Trp Pro Pro Val Asp His Phe Cys Arg Gln Asp Ser Gln
1 5 10 15

Lys Gly Asn His Ser Leu Asn Phe Tyr Arg Ile Ile Phe Tyr Leu Lys
20 25 30

Arg His Val His Lys Trp Gln Asp Ala Gln His Thr Ser Phe Tyr Cys
35 40 45

Val Ser Leu Tyr Cys Thr Ser Gln Ile Leu His Phe Leu Thr Asn Gly
50 55 60

Arg Phe Leu Ala Thr Leu Cys Gln Ala Asn Leu Ser Val Pro Phe Val
65 70 75 80

Gln Gln His Ala Leu Pro Ser Cys Leu Trp Val Thr Phe Trp

<210> 91
<211> 44
<212> PRT
<213> Homo sapiens

<400> 91

Arg Val Asp Gln Asp Gly His Val Lys Leu Asn Leu Ala Leu Thr Thr
1 5 10 15

Glu Thr Asn Cys Asn Phe Glu Leu Leu His Phe Pro Arg Asp His Ser
20 25 30

Asn Cys Ser Leu Ser Phe Tyr Ala Leu Ser Asn Thr
35 40

<210> 92
<211> 44
<212> PRT
<213> Homo sapiens

<400> 92

Arg Val Asp Gln Asp Gly His Val Lys Leu Asn Leu Ala Leu Thr Thr
1 5 10 15

Glu Thr Asn Cys Asn Phe Glu Leu Leu His Phe Pro Arg Asp His Ser
20 25 30

Asn Cys Ser Leu Ser Phe Tyr Ala Leu Ser Asn Thr
35 40

<210> 93
<211> 59
<212> PRT
<213> Homo sapiens

<400> 93

Leu Glu Phe Ser Pro Ile Phe Tyr Cys Leu Arg Leu Ser Ser Phe Leu
1 5 10 15

Trp Leu Ala Tyr Arg Leu Ser Pro Gln Pro Gly Tyr Leu Asp Phe Leu
20 25 30

Glu Phe Ser Pro Ile Phe Tyr Phe Leu Ser Leu Ser Cys Phe Leu Trp
35 40 45

Leu Ala Tyr Arg Leu Ser Pro Gln Pro Gly Tyr
50 55

<210> 94
<211> 38
<212> PRT
<213> Homo sapiens

<400> 94

00069US1.ST25

Phe Asn Phe Pro Pro Phe Asn Leu Val Cys Phe Thr Pro His Cys Leu
 1 5 10 15

Leu Arg Ile Asp Val Cys Thr Gln Leu Phe Leu Trp Thr Gln Pro Thr
 20 25 30

Leu Ser Leu His Ile Leu
 35

<210> 95
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 95

Ala Ser Arg Arg Cys Asn Ile Val Ala Met Cys Pro Glu Ser Val Pro
 1 5 10 15

Ser Gly Gly Phe Leu Val Ser Leu Thr Ser Arg Met Lys Pro Trp Thr
 20 25 30

Leu Thr Val Ser Val Ala Val Leu Lys Asp Gly Val Ser Gly
 35 40 45

<210> 96
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 96

Gly Ala Ile Leu Thr Asn Glu Thr Trp Glu Lys Leu Ala Gly Glu Leu
 1 5 10 15

Val Gly Tyr Phe Pro Phe Ala Leu Lys Gly Ala Lys Glu Arg Tyr Ile
 20 25 30

Pro Phe Phe Phe Pro Phe Ser Ser Leu Asp Val
 35 40

<210> 97
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 97

Lys Arg Glu Cys His Gln Arg Arg Pro Lys Glu Gln Ile Leu Thr Leu
 1 5 10 15

Gln Glu Lys Leu Trp Ala Arg Gln Lys Glu Lys Asp Gln Leu Phe Leu
 20 25 30

Gln Leu Lys Lys Val Ser Met Arg Lys Lys Asn Gly Gly Glu Arg Ser
 35 40 45

Arg Ala Thr Pro Ser Asp Ile Arg Cys Glu Pro Ala Glu Pro Asp Tyr

00069US1.ST25

50

55

60

Ser Arg Gly Asp Ser Leu Pro Pro Arg His Ala Gly Ser Ala Gly Gly
 65 70 75 80

His Asp Arg Pro Gly Ile Val Ile Ala Ala Asp Pro Ala Lys Gln Met
 85 90 95

Phe Arg Pro His Val Leu Thr Thr Arg Lys Ser Val Gly Ser Ala Ala
 100 105 110

Ala Phe Ala Gly Thr Pro Glu Gln Ala Ala Trp Ala Val Pro Leu Gly
 115 120 125

Leu Leu Ser Pro Tyr Leu Asn Met Gly Pro His Ser Pro Met Ala Leu
 130 135 140

Val Gly Ser Ser Glu Gln Phe Ser Ala Pro Trp Gly Ala Phe Met Ser
 145 150 155 160

Gln Pro Gln Pro

<210> 98

<211> 104

<212> PRT

<213> Homo sapiens

<400> 98

Gly Ser Ala Gly Gly His Asp Arg Pro Gly Ile Val Ile Ala Ala Asp
 1 5 10 15

Pro Ala Lys Gln Met Phe Arg Pro His Val Leu Thr Thr Arg Lys Ser
 20 25 30

Val Gly Ser Ala Ala Ala Phe Ala Gly Thr Pro Glu Gln Ala Ala Trp
 35 40 45

Ala Val Pro Leu Gly Leu Leu Ser Pro Tyr Leu Asn Met Gly Pro His
 50 55 60

Ser Pro Met Ala Leu Val Gly Ser Ser Glu Gln Phe Ser Ala Pro Trp
 65 70 75 80

Gly Ala Phe Met Ser Gln Pro Gln Pro Tyr Val Leu Leu Gly His Phe
 85 90 95

Gln His Thr Gln Thr Gly Phe Leu
 100

<210> 99

<211> 62

<212> PRT

<213> Homo sapiens

<400> 99

Cys Ile Glu Ala Pro Phe His Leu His Thr Arg Val Cys Ile Ser Phe

00069US1.ST25

1 5 10 15
Leu Pro Ser Phe Ile His Tyr Leu Leu Ile Phe Val Tyr Leu Phe
20 25 30

Ser Phe Leu Leu Gly Pro Ala Arg Leu Val Phe Cys Leu Cys Ala Leu
35 40 45

Val Thr Ser Ala Ser Gln Ile Ala Gly Thr Thr Gly Asp Leu
50 55 60

<210> 100

<211> 94

<212> PRT

<213> Homo sapiens

<400> 100

Gln Glu Glu Asp Ile Ile Gln Glu Ser Arg Phe Tyr Phe Arg Gly Tyr
1 5 10 15

Gly Leu Gly His Cys Leu Gln Ala Arg Asp Gly Gly Pro Met Glu Gly
20 25 30

Ser Gly Ile Tyr Ser Pro Gln Pro Pro Ala Pro Leu Leu Arg Glu Gly
35 40 45

Glu Thr Thr Arg Lys Leu Tyr Val Asp Ala Lys Arg Ile Asp Thr Ile
50 55 60

Ser Arg Ala Val Phe Pro Phe Thr Phe Leu Ile Phe Asn Ile Phe Tyr
65 70 75 80

Trp Val Val Tyr Lys Val Leu Arg Ser Glu Asp Ile His Gln
85 90

<210> 101

<211> 43

<212> PRT

<213> Homo sapiens

<400> 101

Glu Asn Arg Cys His Thr Val Cys Asn Ser Lys Ser Asp Leu Asp Val
1 5 10 15

Gln Ser Ser Gly Ser Phe Pro Lys Ala Phe His Val Trp Leu Pro Ser
20 25 30

Cys Ser Gly Asn Thr Ser Gln Val Asp Gly Gly
35 40

<210> 102

<211> 71

<212> PRT

<213> Homo sapiens

<400> 102

00069US1.ST25

Ala Ile Lys Pro Ser Leu Gly Val Trp Ser Val Ser Glu Val Tyr Ser
 1 5 10 15

His Cys Lys Trp Ile Leu Thr Val Met Val Asn Thr Pro Gly Gln Arg
 20 25 30

Met Gly His Ala His Ser Tyr Trp Lys Asp Leu Glu His Phe Pro Val
 35 40 45

Asn Cys Ile Leu Phe Gly Phe Ile Ser Leu Thr Glu Trp Thr Phe Phe
 50 55 60

Tyr Met Leu Pro Asn Leu Pro
 65 70

<210> 103

<211> 1779

<212> DNA

<213> Homo sapiens

<400> 103

tggtaccggt ccggaattcc cgggatcacg ccctgccttg gggccctct catataggga 60

gcacagggtt gctctccttc atctcacaca ttcatgttcc actacaggaa gggcgttac 120

tttcaccatc aattgcttag ggtttggcca gcacggggcg gatcccactg ctctgaattc 180

agtgttaat agaaagccct tccgtccggt caccaacatc agcgtccccca cccaaatcaa 240

catctccttc gcatgtctg ccattctaga tgtaatgaa cagctgcacc tcttgtcatc 300

attcctgtgg ctggaaatgg tttggataa cccatttatac agctggaacc cagaggaatg 360

tgagggcatc acgaagatga gtatggcagc caagaacctg tggctcccag acatttcat 420

cattgaactc atggatgtgg ataagacccc aaaaggcctc acagcatatg taagtaatga 480

aggtcgcattc aggtataaga aacccatgaa ggtggacagt atctgttaacc tggacatctt 540

ctacttcccc ttgcaccaggc agaactgcac actcaccttc agtcattcc tctacacagt 600

ggacagcatg ttgctggaca tggagaaaga agtgtggaa ataacagacg catccggaa 660

catccttcag acccatggag aatggagct cctggcctc agcaaggcca ccgcaaagt 720

gtccaggggaa ggcaacctgt atgatcatc cgtgttctat gtggccatca ggccgcaggcc 780

cagcctctat gtcataaacc ttctcgtgcc cagtggcttt ctgggtgccca tcgatgccct 840

cagcttctac ctgccagtga aaagtggaa tcgtgtccca ttcaagataa cgctcctgct 900

gggctacaac gtcttcctgc tcatgtgag tgacttgctc cccaccaggc gcacccccc 960

catcggtgtc tacttcgtccc tggcctgtc cctgatggtg ggcagcctgc tggagaccat 1020

tttcatcacc cacctgctgc acgtggccac cacccagccc ccacccctgc ctcggtggt 1080

ccactccctg ctgctccact gcaacagccc ggggagatgc tgtcccactg cgccccagaa 1140

00069US1.ST25

ggaaaataag	ggcccggtc	tcaccccac	ccacctgcc	ggtgtgaagg	agccagaggt	1200
atcagcaggg	cagatgccgg	gccctgcgga	ggcagagctg	acagggggct	cagaatggac	1260
aaggcccag	cggAACACG	aggcccagaa	gcagcactca	gtggagctgt	ggttgcagtt	1320
cagccacgctg	atggacgcca	tgctcttccg	cctctacctg	ctcttcatgg	cctcctctat	1380
catcaccgtc	atatgcctct	ggaacaccta	ggcaggtgct	cacctgccaa	cttcagtctg	1440
gagcttctct	tgcctccagg	gactggccag	gtctcccccc	tttccttagt	accaactatc	1500
atatccccaa	agatgactga	gtctctgctg	tattccatgt	atcccaatcc	ggtcctgctg	1560
atcaattcca	atcccagaca	tttctccctg	ttcctgcatt	ttgttggctt	cttcagtcc	1620
taccatatgg	ttcttaggtcc	ctcttacgtc	atctgcata	cagactatac	ctcttctgccc	1680
cgctgacttg	cccaataaaat	aattctgcag	agaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	1740
aaaaaaaaaa	aaaaaaaaaa	aaaaaaggc	ggccgctct			1779

<210> 104
 <211> 999
 <212> DNA
 <213> Homo sapiens

<400> 104						
ggaattcccc	ggatggtcac	caacatcagc	gtccccaccc	aagtcaacat	ctccttcg	60
atgtctgcca	tcctagatgt	aatgaacag	ctgcacccct	tgtcatcatt	cctgtggctg	120
gaaatggttt	gggataacco	atttatcagc	tggAACCCAG	aggaatgtga	ggccatc	180
aagatgagta	tggcagccaa	gaacctgtgg	ctcccagaca	ttttcatcat	tgaactcatg	240
gatgtggata	agacccaaa	aggcctcaca	gcataatgtaa	gtaatgaagg	tcgcata	300
tataagaaac	ccatgaaggt	ggacagtatac	tgtAACCTGG	acatttcta	cttccccttc	360
gaccagcaga	actgcacact	cacccctcagc	tcattcctct	acacagtgg	cagcatgtt	420
ctggacatgg	agaaagaagt	gtggaaata	acagacgcat	cccggAACAT	cttcagacc	480
catggagaat	gggagctcct	gggcctc	aaggccaccc	caaagtgtc	caggggaggc	540
aacctgtatg	atcagatcgt	gttctatgt	gccatcaggc	gcaggcccag	cctctatgtc	600
ataaaccttc	tctgtccccag	tggcttctg	gttgccatcg	atgcctcag	tttctacctg	660
ccagtgaaaa	gtggaaatcg	tgtcccattc	aagataacgc	tcctgtgg	ctacaacgtc	720
ttcctgctca	tgtgagtga	cttgctcccc	accagtggca	ccccctcat	cggtgtctac	780
ttcgcctgt	gcctgtccct	gatggggc	agcctgctgg	agaccatctt	catcacccac	840
ctgctgcacg	tggccaccac	ccagccccca	ccccctgc	ggtggtcca	ctccctgctg	900

00069US1.ST25

ctccactgca acagccccggg gagatgctgt cccactgcgc cccagaagga aaataagggc 960
ccgggtctca ccccccaccca cctgccccgt gaggtgtga 999

<210> 105
<211> 586
<212> PRT
<213> Homo sapiens

<400> 105

Gly Thr Gly Pro Glu Phe Pro Gly Ser Arg Pro Ala Leu Gly Pro Leu
1 5 10 15

Ser Tyr Arg Glu His Arg Val Ala Leu Leu His Leu Thr His Ser Met
20 25 30

Ser Thr Thr Gly Arg Gly Val Thr Phe Thr Ile Asn Cys Ser Gly Phe
35 40 45

Gly Gln His Gly Ala Asp Pro Thr Ala Leu Asn Ser Val Phe Asn Arg
50 55 60

Lys Pro Phe Arg Pro Val Thr Asn Ile Ser Val Pro Thr Gln Val Asn
65 70 75 80

Ile Ser Phe Ala Met Ser Ala Ile Leu Asp Val Asn Glu Gln Leu His
85 90 95

Leu Leu Ser Ser Phe Leu Trp Leu Glu Met Val Trp Asp Asn Pro Phe
100 105 110

Ile Ser Trp Asn Pro Glu Glu Cys Glu Gly Ile Thr Lys Met Ser Met
115 120 125

Ala Ala Lys Asn Leu Trp Leu Pro Asp Ile Phe Ile Ile Glu Leu Met
130 135 140

Asp Val Asp Lys Thr Pro Lys Gly Leu Thr Ala Tyr Val Ser Asn Glu
145 150 155 160

Gly Arg Ile Arg Tyr Lys Lys Pro Met Lys Val Asp Ser Ile Cys Asn
165 170 175

Leu Asp Ile Phe Tyr Phe Pro Phe Asp Gln Gln Asn Cys Thr Leu Thr
180 185 190

Phe Ser Ser Phe Leu Tyr Thr Val Asp Ser Met Leu Leu Asp Met Glu
195 200 205

Lys Glu Val Trp Glu Ile Thr Asp Ala Ser Arg Asn Ile Leu Gln Thr
210 215 220

His Gly Glu Trp Glu Leu Leu Gly Leu Ser Lys Ala Thr Ala Lys Leu
225 230 235 240

Ser Arg Gly Gly Asn Leu Tyr Asp Gln Ile Val Phe Tyr Val Ala Ile
245 250 255

00069US1.ST25

Arg Arg Arg Pro Ser Leu Tyr Val Ile Asn Leu Leu Val Pro Ser Gly
 260 265 270

Phe Leu Val Ala Ile Asp Ala Leu Ser Phe Tyr Leu Pro Val Lys Ser
 275 280 285

Gly Asn Arg Val Pro Phe Lys Ile Thr Leu Leu Leu Gly Tyr Asn Val
 290 295 300

Phe Leu Leu Met Met Ser Asp Leu Leu Pro Thr Ser Gly Thr Pro Leu
 305 310 315 320

Ile Gly Val Tyr Phe Ala Leu Cys Leu Ser Leu Met Val Gly Ser Leu
 325 330 335

Leu Glu Thr Ile Phe Ile Thr His Leu Leu His Val Ala Thr Thr Gln
 340 345 350

Pro Pro Pro Leu Pro Arg Trp Leu His Ser Leu Leu His Cys Asn
 355 360 365

Ser Pro Gly Arg Cys Cys Pro Thr Ala Pro Gln Lys Glu Asn Lys Gly
 370 375 380

Pro Gly Leu Thr Pro Thr His Leu Pro Gly Val Lys Glu Pro Glu Val
 385 390 395 400

Ser Ala Gly Gln Met Pro Gly Pro Ala Glu Ala Glu Leu Thr Gly Gly
 405 410 415

Ser Glu Trp Thr Arg Ala Gln Arg Glu His Glu Ala Gln Lys Gln His
 420 425 430

Ser Val Glu Leu Trp Leu Gln Phe Ser His Ala Met Asp Ala Met Leu
 435 440 445

Phe Arg Leu Tyr Leu Leu Phe Met Ala Ser Ser Ile Ile Thr Val Ile
 450 455 460

Cys Leu Trp Asn Thr Ala Gly Ala His Leu Pro Thr Ser Val Trp Ser
 465 470 475 480

Phe Ser Cys Leu Gln Gly Leu Ala Arg Ser Pro Pro Phe Pro Glu Tyr
 485 490 495

Gln Leu Ser Tyr Pro Gln Arg Leu Ser Leu Cys Cys Ile Pro Cys Ile
 500 505 510

Pro Ile Arg Ser Cys Ser Ile Pro Ile Pro Asp Ile Ser Pro Cys Ser
 515 520 525

Cys Ile Leu Leu Ala Ser Phe Ser Pro Thr Ile Trp Phe Val Pro Leu
 530 535 540

Thr Ser Ser Ala Gln Thr Ile Pro Leu Leu Pro Ala Asp Leu Pro Asn
 545 550 555 560

Lys Phe Cys Arg Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys

00069US1.ST25

565	570	575
Lys Lys Lys Lys Lys Arg Ala Ala Ala		
580 585		
<210> 106		
<211> 332		
<212> PRT		
<213> Homo sapiens		
<400> 106		
Gly Ile Pro Gly Met Val Thr Asn Ile Ser Val Pro Thr Gln Val Asn		
1 5 10 15		
Ile Ser Phe Ala Met Ser Ala Ile Leu Asp Val Asn Glu Gln Leu His		
20 25 30		
Leu Leu Ser Ser Phe Leu Trp Leu Glu Met Val Trp Asp Asn Pro Phe		
35 40 45		
Ile Ser Trp Asn Pro Glu Glu Cys Gly Ile Thr Lys Met Ser Met		
50 55 60		
Ala Ala Lys Asn Leu Trp Leu Pro Asp Ile Phe Ile Ile Glu Leu Met		
65 70 75 80		
Asp Val Asp Lys Thr Pro Lys Gly Leu Thr Ala Tyr Val Ser Asn Glu		
85 90 95		
Gly Arg Ile Arg Tyr Lys Lys Pro Met Lys Val Asp Ser Ile Cys Asn		
100 105 110		
Leu Asp Ile Phe Tyr Phe Pro Phe Asp Gln Gln Asn Cys Thr Leu Thr		
115 120 125		
Phe Ser Ser Phe Leu Tyr Thr Val Asp Ser Met Leu Leu Asp Met Glu		
130 135 140		
Lys Glu Val Trp Glu Ile Thr Asp Ala Ser Arg Asn Ile Leu Gln Thr		
145 150 155 160		
His Gly Glu Trp Glu Leu Leu Gly Leu Ser Lys Ala Thr Ala Lys Leu		
165 170 175		
Ser Arg Gly Gly Asn Leu Tyr Asp Gln Ile Val Phe Tyr Val Ala Ile		
180 185 190		
Arg Arg Arg Pro Ser Leu Tyr Val Ile Asn Leu Leu Val Pro Ser Gly		
195 200 205		
Phe Leu Val Ala Ile Asp Ala Leu Ser Phe Tyr Leu Pro Val Lys Ser		
210 215 220		
Gly Asn Arg Val Pro Phe Lys Ile Thr Leu Leu Leu Gly Tyr Asn Val		
225 230 235 240		
Phe Leu Leu Met Met Ser Asp Leu Leu Pro Thr Ser Gly Thr Pro Leu		
245 250 255		

00069US1.ST25

Ile Gly Val Tyr Phe Ala Leu Cys Leu Ser Leu Met Val Gly Ser Leu
 260 265 270

Leu Glu Thr Ile Phe Ile Thr His Leu Leu His Val Ala Thr Thr Gln
 275 280 285

Pro Pro Pro Leu Pro Arg Trp Leu His Ser Leu Leu Leu His Cys Asn
 290 295 300

Ser Pro Gly Arg Cys Cys Pro Thr Ala Pro Gln Lys Glu Asn Lys Gly
 305 310 315 320

Pro Gly Leu Thr Pro Thr His Leu Pro Gly Glu Val
 325 330

<210> 107

<211> 485

<212> DNA

<213> Homo sapiens

<400> 107

ctggaaaggt ccatcgctg gctgaactgc aaccacagct ccactgagtg ctgcttctgg 60

gcctcgtgtt cccgctgggc ccttgcatt tctgagcccc ctgtcagctc tgcctccgca 120

gggccccggca tctgccctgc tgataacctct ggctccttca cacctacaga aagacagaga 180

ctcagccatg ggctgcaaatt gtcacccgtg gagggaggga gacaggaaag gaggcaggag 240

cagagaagtg gaggtgggggg aagaggaatg tgacttccct caccggcag gtgggtgggg 300

ggtgagaccc gggcccttat ttcccttctg gggcgcagtg ggacagcatc tccccgggct 360

gttgcagtgg agcagcaggag agtggagcca ccgaggcagg ggtggggct gggtgtggc 420

cacgtgcagc aggtgggtga tgaagatggt ctccagcagg ctgcccacca tcagggacag 480

gcaca 485

<210> 108

<211> 584

<212> DNA

<213> Homo sapiens

<400> 108

cccagcactt tgggaggcca aggtgggtgg atcacttcag ttcaggagtt tgagaccagc 60

ctgggcaaca tggtaaaacc tcattcttta aaaaaaaaaa aaaaaaaaaa attagccagg 120

cctgggtggtg cgccctgttagt cccagctact tgggaggctg aggctgagac aggaggatca 180

ttttagccca ggacatggaa gttgcagtga gctgagagca tgccactcta ctccagcctg 240

ggtgacagag caagatcctg tctcaaaaaa aaaaaaaaaa aaaaaggaga gagagaaact 300

gcggccctg cctttgcgt tatctctcct ccagcatgaa tgtggataaa accccaaaaag 360

00069US1.ST25

gcctcacagc atatgtaagt aatgaaggc gcatcaggta taaaaaaccc atgaaggggg	420
acagtatctg taacctggac atcttctact tccccttcga ccagcaaaac tgcacactca	480
ccttcagctc attcctctac acaggttaagt tgcagtgagg tctcagggat ggggtgaatg	540
agagcaacca acaaatttaa agaaactatg agtaaatggc gacc	584

<210> 109

<211> 38

<212> PRT

<213> Homo sapiens

<400> 109

Cys Leu Ser Leu Met Val Gly Ser Leu Leu Glu Thr Ile Phe Ile Thr			
1	5	10	15

His Leu Leu His Val Ala Thr Thr Gln Pro Pro Pro Leu Pro Arg Trp		
20	25	30

Leu His Ser Leu Leu Leu	
35	

<210> 110

<211> 60

<212> PRT

<213> Homo sapiens

<400> 110

Leu Ser Ser Ser Met Asp Val Asp Lys Thr Pro Lys Gly Leu Thr Ala			
1	5	10	15

Tyr Val Ser Asn Glu Gly Arg Ile Arg Tyr Lys Lys Pro Met Lys Gly		
20	25	30

Asp Ser Ile Cys Asn Leu Asp Ile Phe Tyr Phe Pro Phe Asp Gln Gln		
35	40	45

Asn Cys Thr Leu Thr Phe Ser Ser Phe Leu Tyr Thr		
50	55	60

<210> 111

<211> 30

<212> DNA

<213> Artificial

<220>

<223> Probe/Primer

<400> 111

tgccagtgaa aagtggaaat cgtgtcccat 30

<210> 112

<211> 22

<212> DNA

<213> Artificial

<220>

<223> Probe/Primer

<400> 112

cccagcctct atgtcataaa cc

22

<210> 113

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Probe/Primer

<400> 113

tcatgagcag gaagacgttg

20

<210> 114

<211> 19

<212> DNA

<213> Artificial

<220>

<223> Probe/Primer

<400> 114

gccatcaggc gcaggccaa

19

<210> 115

<211> 23

<212> DNA

<213> Artificial

<220>

<223> Probe/Primer

<400> 115

caagtcattc atcatgagca gga

23

<210> 116

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Probe/Primer

<400> 116

tgcctgtccc tcatgggtggg

20

<210> 117

<211> 19

00069US1.ST25

<212> DNA
<213> Artificial

<220>
<223> Probe/Primer

<400> 117
gagcagcagg gagtggagc

19